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ABSTRACT

One of the working papers in the final report of the Arizona Board of Regents' Task Force on Excellence, Efficiency and Competitiveness, this report describes a study evaluating the effort by Arizona's universities to recruit and graduate minority students. Current outcomes and recent trends are noted along with the general strengths and limitations of current efforts. Information is provided on many recommendations, including the following: administrative policymaking and the organization of minority education; recruiting and enrollment management (covering the minority student recruitment pool, current enrollment and trends, and underrepresentation); retention (e.g., minority student persistence and graduation rates, degrees awarded to minority students, and early intervention); and role models (faculty and staff hiring, evaluation, and retention). Demographic projections of Arizona's population indicate a dramatic increase in the percentages of Hispanics and American Indians within the next decade. The universities have expanded their minority student recruitment and retention programs recently, but the overall outcomes are unacceptable. Two appendices include the framework questionnaire and the Madison Plan executive summary (describing the University of Wisconsin-Madison's success). Contains 13 tables and 2 figures. (SM)

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MINORITY EDUCATION IN ARIZONA'S UNIVERSITIES

JOHN J. WOOD

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INTRODUCTION

ISSUES IN MINORITY EDUCATION

More than a third of Arizona's public school students during the 1986-87 fiscal year were ethnic minorities; the percentage of minority children in kindergarten and the first grade approached forty percent. Yet, there are losses of minority students from the 9th grade to graduation of over forty percent, compared with losses of nearly a third of the majority students. Community college enrollments are relatively close to estimates of the percentage of minority high school graduates, but minority students are underrepresented in university enrollments, and among university graduates.

Arizona's future depends upon how the state responds to the educational needs of its rapidly changing citizenry. The current loss of human potential is unacceptable. The Jeffersonian ideal of an educated citizenry as the basis for self-rule and democratic participation is endangered, as is the more utilitarian ideal of the "greatest good for the greatest number" (Strike 1985).

John J. Wood is a professor at Northern Arizona University where he has been teaching anthropology for 22 years. He is a cultural anthropologist with a decade of applied research experience with the Navajo in northern Arizona. He was a member of the Arizona Universities' Study Group on Minority Student Recruitment and Retention, has served as the chair of the Affirmative Action Committee at Northern Arizona University, and has been involved in policy research and evaluation off minority affairs in Arizona universities for the past eight years. His recent publications deal with the impacts of Navajo livestock reduction, and land and religion in Navajo culture.

Changing the pattern of educational achievement is vital to the future of Arizona, for reasons of economic prosperity and social stability, as well as for reasons of equity.

Meaningful progress in changing the pattern of educational achievement will require a state-wide comprehensive, integrated, and unified plan for minority education. The universities have a vital role to play in such a plan, especially in community, community college, and public school outreach, and in recruiting and graduating minority students.

PURPOSE OF STUDY

The primary objectives of this paper are to communicate my understanding and evaluation of Arizona universities' efforts to recruit and graduate minority students, and to offer suggestions for improving minority student access and persistence. It focuses on current outcomes and recent trends, and the general strengths and limitations of current efforts.

The strengths and weaknesses of current efforts to recruit and retain minority students, and current outcomes and recent trends are discussed in four sections:

1) administrative policy making and the organization of minority education;

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2) recruiting and enrollment management;

3) retention; and

4) role models.

Administrative policy making and the organization of minority education, and role models are highlighted; the former because policy and organization provide coherence and focus for recruiting and retention, and the latter to remind readers that minority faculty, staff, and administrators are important role models and not simply equal opportunity, affirmative action goals.

METHODS AND LIMITATIONS

Primary data for this study come from several sources: personal interviews, narrative questionnaires, and summary statistics. The recent literature on minority student recruitment and retention provides the larger context and information concerning effective programs, policies, and attitudes. This literature is summarized and annotated in Cowart, Wood, and Cotera (1988).

Some statistical data were provided by the universities in response to requests from the Task Force staff. Most of these data are summarized in a report by Cotera (1987). Bartram and Gebel's (1988) comprehensive environmental scan is an invaluable source for assessing current outcomes and trends. A student survey conducted on each campus during the spring semester, 1988 is discussed in Cotera (1988). Minority recruitment and retention reports and affirmative action reports by the universities to the Board of Regents provided helpful information, as did members of the Board of Regents staff.

I conducted personal, open-ended interviews with minority students, faculty, and staff, and minority and non-minority administrators in January, February, and March, 1988. Themes from these interviews are considered in detail in Wood (1988). I also met with administrators in each of the universities for brief interviews and to introduce a narrative questionnaire.

The questionnaire is a slight modification of the American Council on Education's "Framework for Evaluating Institutional Commitment to Minorities: a Guide to Institutional Self-Study" (American Council on Education 1976). The questions cover eight principal institutional sectors:

1) Admissions;

2) Financial Aid;

3) Counseling, Educational Support, Advising and Placement;

4) Academic Affairs;

5) Student Affairs;

6) Graduate and Professional Schools;

7) Affirmative Action; and

8) Central Administration (See Appendix A).

Select administrators were asked to provide responses in their area of responsibility.

It was difficult, and in some cases impossible, to obtain comparable data for all three universities. The universities present and, evidently, collect data in different formats, and some data are simply not readily available. That is why

data are presented for some universities and not others in this report, and why sometimes the years chosen for analysis are inconsistent. Also, a few administrators did not respond to the questionnaire, so there are some unavoidable gaps in those data too.

The major limitation of the study is a lack of strict comparability among the three universities for all issues. I also had neither the time nor the resources to conduct a thorough evaluation of every program in each university (ASU alone recently enumerated 60 programs). Nevertheless, there are enough data available to identify where the primary problems lie and to suggest what might be done about them.

ELEMENTS OF SUCCESSFUL MINORITY EDUCATION PROGRAMS

There are many reasons why minority students do not attend universities at the same rate as non-minority students. The most important reasons are:

1. inadequate preparation in basic academic skills;
2. underrepresentation in college preparatory programs;
3. higher priorities for other opportunities, needs, and obligations;
4. limited socialization for going to college by family and peers;
5. difficulties in applying for financial aid, and the discouraging prospect of financial indebtedness.

Minority recruitment, in order to be successful, must incorporate pro-active strategies for addressing the reasons why many minority students do not attend universities. For example, some strategies that address the reasons cited above include:

1. kindergarten through 12th grade outreach, and pre-college activities;
2. information and recruitment activities aimed at parents;
3. recruitment activities tailored to specific minority populations and high school locations;
4. efforts to involve employers, community agencies and community organizations.

Many of the reasons for dropping out or stopping out of college are the same as the reasons for not attending college. Retention programs must address these factors also, but in a new context that includes the university environment. Optimal retention of minority students demands university-wide commitment, reflected in:

1. strong and visible support by the president and central administration;
2. funding priority;
3. effective programming in the non-academic component of student development;
4. involvement of faculty in the academic and professional aspects of student development, such as tutoring, advising, mentoring, and developmental courses;

5. strategic placement of programs in terms of reporting, responsibility, and authority;

6. sensitivity to cultural differences and a university environment that welcomes minority students;

7. adequate representation of minority faculty, professional staff, and administrators.

Minority education is a function of an entire university, not just student services, where most programs are typically located. Minority education is very much an academic issue. Universities have to involve faculty in significant ways, and academic programming has to be responsive to minority student needs. Efforts to improve minority education must be coordinated, not fragmented. Universities can usually enumerate large numbers of programs that are designed to enhance minority student recruitment and retention, but most are not evaluated for effectiveness, and there is, typically, no coordinated, university-wide effort, or accountability.

A model plan, that incorporates many of the elements of successful minority recruitment and retention programs, has been proposed recently by the University of Wisconsin-Madison (University of Wisconsin-Madison 1988). "The Madison Plan" was developed in consultation with students, faculty, staff, administrators, and community members, thus it is represents the university community in its widest sense.

Its key features are: a commitment to the value of ethnic diversity in achieving excellence in liberal education; coherence and focus; outreach; specific goals and objectives; a timetable for implementation; and the identification of administrators responsible for each program (See Appendix B).

ADMINISTRATIVE POLICY MAKING AND THE ORGANIZATION OF MINORITY EDUCATION

INTRODUCTION

Administrative policies are courses of action adopted and pursued by a university administration. A policy statement is just that; it becomes a policy when it is adopted and pursued. Policy making is a collective activity that requires an awareness of the issues that the policy will impact, and reliable information about the institution and its environment; information to insure that the participants are talking about the same thing, and information for making choices. Policy implementation must insure that action serves policy, by addressing the issues of organization and funding. The principal organizational question is: What is the most effective coordination of sustained effort in the service of the policy? The principal funding question is: What distribution of resources will guarantee sustained effort in the service of the policy? Finally, policies must be regularly reviewed to assess their impact, and to change course if necessary.

Policy making and implementation take place in universities within a well-defined context. Most universities partition the set of institutional activities into a number of hierarchical levels, resulting in a tree-like formal organization. Partitioning leads to horizontal independence; and jurisdictional questions and domain protection arise because the partitions become units of accountability and resource distribution. This leads to the

establishment of alternative organizations, such as committees, task forces and study groups, when there are problems that interest more than one partition.

What are the major administrative policies that affect minority student recruitment and retention in Arizona's universities, and, how are they implemented? One section of the "Framework" questionnaire, Section VIII, was designed to provide some general answers to these important questions, although its focus is on equal opportunity. Interviews on the three campuses supplied some additional insights. Unfortunately, the University of Arizona did not respond to this set of "Framework" questions.

NORTHERN ARIZONA UNIVERSITY

President Hughes has made public policy statements concerning the importance of minority education at NAU on numerous occasions. His central staff believe that he is committed to addressing minority concerns, and they indicate that: "The leadership of NAU has a clear understanding of minority issues as they relate to both present conditions and future directions of the institution." Commitment and awareness of the issues are the starting points for good policy making.

The management information system at NAU needs improvement. A strong institutional research group and a developed student database are relatively recent at NAU: consequently, there are gaps in information on minority students, especially trend information. There are recent efforts to correct the situation; work by the admissions office is exemplary in this regard.

Institutional research seems to be addressing important categories of information related to minority concerns, and the differences between groups are recognized. Task Forces and informal consultation are the principal means of soliciting advice from minorities regarding these concerns. There are some regular reports generated, but the overall impression given by responses to the questionnaire is that much reporting is ad hoc.

NAU has multiple linkages with the minority communities it serves, primarily of an instructional nature. But there are no formal mechanisms for obtaining advice from communities that could help in formulating policy.

The organization of minority education at NAU is self-described as a "decentralized administrative model." This means is that programs are administered through existing administrative structures. And, most programs are administered through Student Services. There is no centrally coordinated, university wide program of minority education. NAU reports that there are twelve minority faculty and staff in "high level administrative positions," of whom two have ready access to the President, and, by sitting on the President's Council, the latter have some influence on administrative policy.

Reallocation of the continuing budget provides the major source of funds for policy implementation, although Program Change requests have assisted the development of some minority education programs at NAU in the past. External funding is also sought. It is not clear if there are overall priority budget set asides in support of administrative policy implementation in minority education.

The Affirmative Action Office tracks minority representation; there are annual performance reviews that provide data; and task forces are convened and special studies are conducted to review the status of minority participation. However, there are no comprehensive, regular policy reviews of minority participation in the entire institution.

ARIZONA STATE UNIVERSITY

President Nelson's strong support for minority education programming and equal opportunity goals is evident in policy statements to the faculty and staff, and in presentations before the public. In my interviews with administrators at ASU, it was clear that the President's message is understood. The President has excellent opportunities to become aware of the issues that impact policy through his periodic meetings with minority faculty and staff groups on campus, and his Minority Affairs Council, which includes representatives from the service community.

The Admissions Office, the Office of Institutional Analysis, and the Affirmative Action Office collect appropriate data, analyze it, and distribute information for policy making when and where it is needed. Periodic retention studies are conducted, a detailed Human Resources Report is prepared and disseminated by the Affirmative Action Office, and enrollment reports are prepared and reviewed each semester. Minority advice is solicited, and there are attempts to be sensitive to the distinctive concerns of different minority groups. Apparently, there has been no comprehensive, regular review of minority education policy at ASU. There is a detailed study currently underway by the Morrison Institute for Public Policy that promises to serve as a good baseline for a regular, comprehensive policy review. There are more than a dozen examples of interchange between institutional personnel and representatives of minority communities reported in the response to the "Framework" questionnaire. They cover a wide range of activities and include formal as well as ad hoc groups. The potential for policy impact from ASU's environment is great, but the interchange is dispersed throughout the university without any formal mechanisms for coordinating and evaluating it institution-wide.

A recent study has identified 60 programs that "support the academic achievements of minority students." Some of the programs are designed for all students, and some are focused on minority achievement. The programs are placed throughout the university depending upon: "function, availability of resources, needs of both students served and program developer, funding source, intercollegiate or departmental relationships, and external regulations."

The funding is stable for some programs, and not for others. The primary organizational emphasis on minority student development is in Student Affairs. Like NAU, there is no centrally coordinated, university wide program of minority education at ASU. In personal interviews, administrators describe the organization as "decentralized".

There are 41 minority administrators at the level of department chair or assistant director and above at ASU. Through their positions and their personal influence, they can have a significant impact on minority education policy. Access to the President is via an open-door policy, periodic meetings with minority faculty and staff groups, and the

President's Minority Affairs Council.

Most funding that directly or indirectly influences equal opportunity objectives at ASU comes from the continuing budget, thus funding is relatively stable. Some programs are supported by other funding sources. Most equal opportunity activities are not directly related to specific budget items; it is said that equal opportunity goals and objectives affect expenditures in many categories in many ways. High priority is given to equal opportunity goals. "Many of the specific goals are not budget-driven, but rather are statements and commitments to action through normal hiring processes and through student recruitment, retention, and related activities." ASU strongly emphasizes student services in its minority affairs thrust, although funding through a Program Change request is being sought for advising and instructional activities.

UNIVERSITY OF ARIZONA

As mentioned above, the University of Arizona did not respond to the "Framework" questions on administrative policy and organization, so I am limited to a few, brief comments based on observation and interviews.

President Koffler publicly supports equal opportunity goals and minority education goals. The clearest policy results are in the area of Student Affairs, where remarkable changes in organization and programming have taken place within the last few years. There is less evidence of minority education policy in the Academic Affairs segment of the university. Like NAU and ASU, there is no centrally coordinated, university wide program of minority education at UA.

The organization of minority recruitment and retention at UA is basically decentralized. Most programs are administered through existing administrative structures, although minority affairs has a much higher profile in Student Affairs at UA than at ASU and NAU.

CONCLUSIONS

The starting points for good policy in minority education are commitment and an awareness of issues. The university presidents have made policy statements in support of minority education at their institutions, and the available evidence indicates that their messages have been received. There also have been ample opportunities for policy makers to become aware of the issues. The universities have good policy statements, but their policies in minority education are not as coherent or focused as they could or should be. There are several ways that minority education policies can be developed so that they provide coherence and focus.

First, policy makers must have reliable information about the university and its environment. There is room for improvement, but the information systems at all three universities can provide good information if policy makers make it clear what they need and when they need it. Perhaps the most crucial kinds of information are regular evaluations of the effectiveness of minority education programs. Also, some formal means of soliciting community advice on policy is essential.

Second, there must be effective coordination of sustained effort in the service of the policies. The major organizational deficit in Arizona's universities is the lack of centrally

coordinated, university wide programs of minority education. There are numerous examples in my interviews and in the questionnaire responses discussed above of problems attending the horizontal independence of programs and activities. One of the most pervasive problems is the division, at some point in the administrative hierarchy, of Student Affairs and Academic Affairs. Student Affairs has the major responsibility for minority affairs in Arizona's universities. Minority education is very much an academic concern, and effective coordination must include the academic component of the universities, prominently.

Third, the distribution of resources must guarantee sustained effort in the service of the policies. Most funding for minority education programs comes from the continuing budget. New or enhanced programs must be funded through reallocation of resources, Program Change requests, or from external sources. Given the universities' histories and missions, only so much reallocation can take place before other vital functions of the universities are curtailed.

Decentralization has been the obvious answer to the problem; programs can be added to or incorporated within existing administrative structures without major reallocations of resources. But energies and funds become dispersed in a decentralized system, and overall accountability becomes a problem. Minority education goals and objectives affect expenditures in many ways, but it is difficult to make the goals and objectives budget-driven.

In order for the distribution of resources to guarantee sustained, effective effort, policy goals and objectives must be budget-driven. Given existing constraints, some mix of decentralization and centralization that combines the best features of both is the ideal way to implement minority education policies in Arizona's universities. It is possible, for example, to centralize coordination and decentralize activities.

Fourth, and finally, policies must be reviewed frequently. Policy makers have to be responsive to environmental changes, realize when programs are not working, and be prepared to change directions and emphases.

RECRUITING AND ENROLLMENT MANAGEMENT

INTRODUCTION

Recruiting and enrollment management are access policy in action. These two functions are leading contributors to the composition of a university's student body; consequently, they can play a major role in reducing under-representation of minority students.

There are several ways of measuring underrepresentation, each with a slightly different emphasis. Richardson and Bender (1987:5) list three common approaches:

First, and perhaps most common, underrepresentation is measured by comparing the percentage of minority students enrolled with the percentages of minorities in the state's population. This approach emphasizes equity in the broadest sense, but it does not directly address the educational system.

Second, the percentages of "qualified" minority students among the state's high school graduates and community college transfers are compared with the percentages of minorities in the student

body. Qualification is a function of enrollment management strategies, and admissions standards. This approach addresses the educational system, but it does not reflect the necessary linkages among the educational system's components. The universities set the standards and manage enrollment, and the public schools and community colleges are expected to respond by producing qualified students.

A **third** way of measuring underrepresentation is to compare the proportion of minority students graduating from high schools in a university's primary service area with their representation in the student body.

This approach explicitly recognizes important linkages with the public school sector of the educational system; it would require a university to work with public schools to foster academic achievement and to assume some responsibility for developmental work. It does not address community college linkages.

The three ways of measuring minority underrepresentation imply different mixes of strategies for reducing the degree of minority underrepresentation. Richardson and Bender (1987:5) identify three specific strategies in their research data. In the "traditional" strategy a university simply competes for a limited pool of minority graduates. The "mediation" strategy emphasizes the first strategy plus bridge programs and academic support services. The third strategy, "intervention", involves expanding the pool of minority candidates by working with public schools and community colleges. The first two measurement approaches imply some mix of "traditional" and "mediation" strategies, although measuring underrepresentation in these ways would not preclude "intervention". In the third measurement approach, "intervention" is most important, but not to the exclusion of "mediation".

As stated previously, meaningful progress in changing the pattern of educational achievement in Arizona will require a state-wide comprehensive, integrated, and unified plan for minority education. Arizona's universities are four year, state funded institutions, with lower division programs; therefore, they have an obligation to be responsive to the state's high school graduates. For these two reasons, I suggest that minority student underrepesentation in Arizona's universities be measured by comparing the combined freshman class enrollment with the percentage of Arizona minority high school graduates.

I suggest the freshman class for comparison, because that is the primary access point for lower division work. The Arizona universities have different but complementary missions; they have different campus environments; and they have different primary state service areas (with some overlap). A combined enrollment measure encourages the universities to pool resources and to work together to find the best fit of students and university, and it recognizes the existence of different primary service areas with different ethnic compositions. Recruiting and enrollment strategies that work best within this framework are intervention strategies, with mediation.

Enhancing community college transfer must be part of a state wide minority education plan, and comparisons of university enrollments, especially upper division enrollments, with community college enrollments are important

supplementary indicators of progress in reducing minority student under-epresentation in the universities.

OUTCOMES

Recruiting and enrollment management strategies for minority students in the three universities are basically mediation strategies. The universities are competing for a limited pool of "qualified" minority students, and for mediation they are mostly using bridge programs and academic support services located in student affairs. There are a few notable exceptions, including some intervention programs designed to expand the pool of minority students by working with community colleges and public schools.

Outcomes of past and current recruiting and enrollment strategies are discussed in four sections: Arizona High School Service Areas; The Minority Student Recruitment Pool; Current Enrollment and Trends; and Underrepresentation.

Arizona High School Service Areas

The universities have different primary state service areas, defined as counties of origin of Arizona high school graduates that account for at least 75 percent of their total Arizona high school enrollment (Table 1). Arizona State University draws almost 90 percent of its Arizona high school graduates from Maricopa county. Fifty percent of the University of Arizona's Arizona high school graduates are from Pima county, but a large share is also from Maricopa county. Northern Arizona University serves a wider range of areas in the state, including "rural" counties, but Maricopa county is the single largest provider of Arizona high school students.

In 1984, NAU had the highest percentage of new students who were freshman Arizona residents, followed closely by UA. Only 56 percent of ASU's new students were freshman Arizona residents. The lower figures for ASU are the result of larger percentages of new out of state students and transfer students.

The Minority Student Recruitment Pool

Minority student enrollment in Arizona's public school primary grades averages between 35 and 40 percent. Therefore, it is likely that the ethnic composition of Arizona's public high school graduating class in the near future will reflect a higher percentage of minority students, even if current enrollment losses continue. But the rate of change will vary by region within the state (Figure 1). Maricopa and Pima counties have the largest numbers of public school students; however, the lowest percentages of minority public school enrollment are in Maricopa county, and the highest percentages are in Pima county and in the non-urban counties of the state.

These enrollment patterns have important implications for recruiting. For example, the ethnic composition of the recruitment pool for UA and NAU will change more rapidly than for ASU, if current primary state service areas persist. A comparison of estimated minority high school graduates shows that the numbers of graduates by ethnicity also vary considerably by region (Figure 2). The largest numbers of minority graduates throughout Arizona are Hispanics. In the non-urban counties, though, the number of Hispanics is almost matched by the number of American Indian graduates.

Maricopa county has the largest number of Black and Asian high school graduates.

Current Enrollment and Trends

Current enrollments of minority students in NAU, ASU, and UA reflect the relative ethnic composition of their primary service areas, as should be expected, but, there are discrepancies in the overall percentages of university minority students and the overall percentages of minority high school graduates (Table 2).

The aggregate state community college enrollments are a better match with estimated high school graduation statistics.

The percentage of American Indians at NAU duplicates the percentage of American Indian high school graduates, and the enrollments of Asians at ASU and UA are proportionately higher than the high school estimate. Otherwise, there is a rather large divergence in percent enrollment.

The past five years, from 1983 through 1987, have seen a general increase in university enrollments in Arizona, and each university showed a positive increase in minority headcount enrollment for each ethnic group (Table 3).

However, the changes in percent of total headcount are not impressive. For some ethnic groups in some universities, there was no change, and in one university there were decreases for two ethnic groups. The percent changes in aggregate Hispanic and Asian enrollments were the largest increases, respectively 1.9 percent and 1.5 percent.

For assessing outcomes, this five year period is significant, since it covers the initial implementation phase of the Arizona Board of Regents' minority recruitment and retention policy based upon the recommendations of "The Arizona Universities' Study Group on Minority Student Recruitment and Retention."

Underrepresentation

Previously, I have argued for using a comparison of Arizona minority high school graduation and combined university freshman class enrollments as a measure of representation, or, conversely, underrepresentation. To reiterate the basic argument: The comparison emphasizes the necessary continuity between the public schools and the public universities, and their shared responsibility for educating Arizona's youth. And, it bears a closer relationship to the potential university recruitment pool than would comparisons with the population at large. A combined university enrollment comparison recognizes the differences in each university's ambience, mission and primary service area, and, ideally, combining enrollment for accountability would encourage cooperation in finding the best fit of student and university.

Table 4 presents recent comparable data for headcount enrollment for the freshman class of 1986. There is better agreement between percent enrollment by ethnicity in the freshman classes and the percentages of estimated high school graduates than between overall headcount university enrollment and the latter. The better agreement is probably a reflection of enhanced minority recruitment programs in all three universities over the past two to three years. The overall headcount university

enrollment figures are also diminished by poor retention for most ethnic groups. Table 5 contrasts the combined freshman class for 1986 and an estimate of high school graduates from the previous year. The purpose of the contrast is to assess the representation of each ethnic group, and to suggest rough target numbers of students for parity for underrepresented groups.

Freshman enrollment for American Indians would have to be increased by a factor of three for parity, and freshman enrollment for Hispanics would have to be increased by a factor of about 2.4. Blacks are close to parity, and Asians and Whites are adequately represented. The target numbers are "rough" because university students do not comply 100 percent with ethnicity questions, and we do not know the precise numbers of high school graduates by ethnicity in the state. It is impossible to improve upon these estimates at present.

However, the freshman class enrollment estimates could be made more relevant by comparing the most recent enrollments of Arizona residents.

THE ACCESS ENVIRONMENT

The traditional role of universities in enhancing minority access has been to compete for a limited pool of potential students through refining recruiting and developing enrollment management strategies. Mediation, student development and university preparation through bridge program and academic support services, and intervention, working with public schools and community colleges to strengthen preparation and to encourage interest in attending a university, are recent improvements. Arizona's universities are in the process of refining minority recruitment; developing, expanding or enhancing mediation programs; and enhancing or beginning some intervention programs.

Many of these improvements are new. All three universities now have summer bridge programs, and other developmental programs to assist students in the transition to university life and curricula. The University of Arizona's "APEX (Academic Preparation for Excellence)" program, Arizona State University's "2+2+2" program and its new "Project Prime", and Northern Arizona University's "Macy Foundation Project" are all excellent examples of intervention's potential for increasing minority access.

The universities' "traditional" access environment is presented in two parts: The first addresses current undergraduate recruitment and admissions, and the second reviews some of the same issues in graduate and professional colleges. The data for these discussions are responses to the Framework questionnaire, and notes from personal interviews and observations.

Undergraduate Recruitment and Admissions

The Framework questions on undergraduate recruitment deal with how minority candidates are identified; the relationships among high school counselors and recruiting personnel; recruiting efforts for specific disciplines; and with recruiting materials that portray the image of the university (Appendix A). Admissions questions cover skill and experience of personnel; flexibility of admissions criteria; and comparisons of standard admissions with high risk admissions. Finally, there is a question

on outcomes.

These questions were directed to the chief admissions officers. I also conducted informal interviews with the three chief admissions officers, with the Director of Minority Recruitment at ASU, Office of Minority Student Affairs personnel at UA, and personnel in the Multicultural Center at NAU. I received no formal response to the Framework questions on undergraduate admissions and recruitment from ASU, but I obtained some comparable information from the informal interviews. Recruitment and admissions issues are discussed separately, following a brief overview of the organization of undergraduate minority recruitment at ASU, UA, and NAU.

Minority recruitment at UA, ASU, and NAU requires cooperation between the admissions offices and special minority affairs components of student affairs. At ASU, there is a separate office of minority student recruitment that does not report to the admissions office. At UA, minority recruiters function out of the Office of Minority Student Affairs, in cooperation with the admissions office. Northern Arizona University's minority recruiting is administered by the admissions office, with recruiting teams that are more widely based, including personnel from the Multicultural Center.

All three universities have specific Arizona high schools and community colleges with high minority enrollments that recruiters visit on a regular basis, usually once a month, to identify minority candidates for admission and to provide information and assistance. Peer recruiters are commonly used for these visits. Other methods of identifying minority persons who might be interested in attending one of the universities include direct mailings, summer institutes, public school outreach, and on-campus information or admissions days. The latter involve both students and parents. On-campus programs that target specific ethnic groups are relatively recent. Northern Arizona University is currently experimenting with programs on reservations.

Admissions officers believe that recruiting programs are, or will be, successful. The University of Arizona, for example, reports that more than 60 percent of the new minority students in the Fall 1987 freshman class are from their 30 target schools.

Inadequate high school counseling was mentioned as a barrier to access in interviews with students and some recruiting staff (Wood 1988). Northern Arizona University and the University of Arizona both report efforts to develop good working relationships with counselors. The University of Arizona's Office of Minority Affairs and counselors in their target schools sign contracts detailing the nature of their relationship. At NAU, there is a special on-campus program for counselors once a year, and counselors are invited to participate, at the university's expense, in on-campus orientation and information days. Both consider regular, consistent contact important for developing and maintaining good working relationships.

All three universities refer information on applicants to academic units for follow-up. Journalism and Engineering at NAU have specific minority recruiting efforts. Many colleges and programs at UA and ASU are involved in minority access, either through recruiting or pre-college preparation. All three also are sensitive to the need for recruiting materials to

accurately portray minority life on campus, and involve members of "target audiences" in production and review of materials.

The Arizona Board of Regents sets admissions standards for Arizona's public universities, and, of course, those students who meet the standards are admitted. Current Arizona admissions standards are relatively flexible. But, sensitivity to the backgrounds, needs, and interests of minority students, and flexibility are especially important in deciding upon admission by exception, or conditional admission. At NAU, applications that do not meet the standards are reviewed by the Admissions Review Committe. The Admissions Review Committee has minority faculty representation. The University of Arizona admissions staff are said to be "a culturally diverse and well-trained staff of individuals who demonstrate sensitivity to the needs of minority students." Departments and colleges may have additional entrance requirements. This issue was not addressed specifically in the Framework questionnaire, but interviews I took with students and faculty suggest that similar sensitivity is needed in considering admission to programs within the universities.

The University of Arizona reports that: "At this time, all resident minority students are admitted through standard practices." They have just begun to identify high risk non-resident students, and the practices do not yet apply to resident students. At Northern Arizona University, "With the new admissions standards implemented statewide in Fall 1987, there was a significant increase in the number of minority students admitted by exception." NAU and UA note some gains in increasing the pool of admissible minority students through aggressive recruiting practices, but they recognize the need to work for more minority representation in their institutions.

Graduate and Professional Colleges

Minority accessibility to graduate and professional programs is important for increasing the representation of minority professionals in society, and for increasing higher education faculty, professional staff, and administrative recruitment pools. Questions about graduate programs were directed to the graduate deans. Professional colleges were defined as the Colleges of Law at ASU and UA, and the Colleges of Pharmacy and Medicine at UA, and questions were directed to representatives of each college.

Graduate college minority student enrollments for the Fall 1987 semester range from 9.1 percent at ASU to 11.6 percent at UA, with NAU falling nearly halfway between at 10.7 percent, based on information in the Arizona Board of Regents Minority Recruitment & Retention Report for 1987. The enrollment figures in this report for UA do not correlate with other information; they may be FTE (Full-time equivalents) rather than headcount, so the conclusions for that institution are tentative.

The relative frequencies of each ethnic group closely mirror those for Arizona university enrollments in general. Professional college minority enrollments are higher than graduate college minority enrollments at UA and ASU. The minority enrollments in ASU's College of Law and UA's College of Medicine are particularly noteworthy.

Graduate and professional college recruiting and admissions are much more a function of specific programs, departments, and colleges than undergraduate admissions and recruiting. Selection criteria at the postgraduate level are more specific from the perspective of both students and faculties. Consequently, graduate colleges typically play a coordinating role, and professional colleges usually have their own recruiting and admissions procedures and personnel. The general response to the Framework questions on this topic for the College of Law at ASU were included with ASU's general Graduate College response; each of the professional schools at the University of Arizona provided separate responses. Arizona State University's College of Law contributed additional information, specific to its program. Minority graduate student recruiting and admissions are considered first.

Identification and recruiting of minority students for graduate work differ widely in approach, interest, and intensity in the specific graduate programs in each of the universities. Some programs have active identification and recruitment programs that involve recruiting trips, others simply rely upon lists of potential minority applicants that the graduate colleges send them periodically. Arizona State University and the University of Arizona report that they are giving careful consideration to developing a system for identifying and tracking minority recruitment activities in their universities to provide needed information to students and departments, and to monitor the process for possible intervention.

National, regional, and professional minority locator lists and services are used for identification in each university. The graduate colleges usually sponsor the services, send information materials to persons on the lists, and refer names to departments for follow-up. Arizona's universities also participate in two intervention programs for encouraging minority students to apply to graduate school. The "Consortium for Graduate Opportunities for American Indians" is centered at NAU, and the University of Arizona is also one of the 15 participating institutions. Arizona State University is not a member of the consortium. "Project 1000: Admitting an Additional 1000 U.S. Hispanic Students into Graduate School" is coordinated at ASU; the University of Arizona participates in the program, but Northern Arizona University does not.

The graduate colleges do not emphasize building minority attendance in specific departments, but they do offer recruitment incentives, and support programs that are trying to recruit and admit minority students. They all apply for grants and fellowships to support graduate work for minorities, for example. In addition, at NAU "the Graduate Dean has required that 10 to 20% (depending on the Department) of the assistantships must go to minority students or the funds will not be available to that Department." At UA last year, the Graduate College awarded 17 fellowships to minority students; "the Graduate College [also] awards 50 fellowships to the departments and 30 to the deans. Efforts are currently underway to encourage deans and department heads to award some of these fellowships to minority students particularly for recruitment purposes." Recruitment incentives at ASU include: Regents Tuition and Academic Scholarship set-asides for minority and underrepresented groups; application fee waivers; and "Once an academic

program identifies an admissible applicant, the Graduate College will pay for a campus visit by the prospective student."

The graduate colleges set minimum standards for admissions at ASU, UA, and NAU. Departments may set their own standards in addition. Each graduate college has admissions flexibility, through provisional status or non-degree study, or written justification by departments. For example, at the University of Arizona, each department is allowed a 15 percent admissions exception to their grade point average requirement. The respondents from the graduate colleges indicated either directly or indirectly that they do not perceive admissions requirements to be a major barrier to minority recruitment in their institutions. The ASU response, however, called attention to the observation that minority students who are close to meeting published standards may not apply because they do not know that exceptions can be made.

The professional colleges -- law, medicine, and pharmacy -- have relatively high minority enrollments. It is possible that professional schools are more attractive to minority students than is general graduate study. In the case of the Colleges of Law, though, a large part of their success in enrolling minority students is undoubtedly the direct result of clearly defined minority education goals and policies, aggressive recruiting activities, including an emphasis on follow-up and personal contact, and their consideration of a wide range of indicators of potential success in admissions decisions. I have no specific information on the College of Medicine's recruiting activities. The College of Pharmacy reports an emphasis on minority access, but they have no specific procedures for identifying prospective minority students, other than the facilities available to all colleges at the University of Arizona.

Arizona State University's College of Law has an "affirmative action admissions policy". The college has a goal of 20 percent minority student enrollment, which they are close to achieving (Fall 1987 enrollment was 16.2 percent). The University of Arizona's College of Law realized substantial increases in minority student applicants and enrollees last year, and, while the college reports no specific enrollment goals, they are committed to enrollment diversity. Both colleges give minority students special consideration in admissions and financial aid. Both also participate in and initiate an extremely wide range of recruiting activities.

Policies, procedures, financial commitment, and outcomes clearly indicate that minority education is a high priority for Arizona's Colleges of Law. I have little information upon which to base an evaluation of the College of Medicine's and the College of Pharmacy's priorities, other than their significant percentages of minority students (based on tentative data).

CONCLUSIONS

Minority student access to Arizona's universities must be improved, particularly for Hispanics and American Indians. The recognition that successful recruiting and enrollment management aimed at increasing minority student access to university education requires communication, cooperation, and coordination among all segments of the educational community is the necessary foundation for appropriate action.

Postgraduate access is related to undergraduate access and persistence, which is, in turn, related to public school persistence and preparation.

The universities need to further develop their intervention strategies and partnerships with public schools, community colleges, and each other, in recognition of their responsibilities in the educational "stream". Positive change will be very difficult if the attitude that "the major problems of minority access are outside of our control" persists. There are several examples of promising programs that are already in place, or in the planning stages, in Arizona's universities. For example, "Project Prime", co-directed by persons from ASU, the Educational Testing Service, and the College Board, is based upon a careful national study of successful intervention programs, thus it has a good chance of succeeding in Arizona. The University of Arizona's APEX program, mentioned earlier, is in place and producing results. Other early intervention models may be found in a new book by Theodore L. Gross (1988), entitled "Partners in Education: How Colleges Can Work with Schools to Improve Teaching and Learning". Intervention models are also important for postgraduate access, and, as mentioned previously, Arizona's universities participate in two such programs.

Identifying potential minority student applicants and getting them admitted, enrolled, and prepared for success are enhanced by communication, cooperation, and coordination among student services programs and academic units within each university. Each university needs an inventory of recruitment programs and a recruitment and admissions tracking network to facilitate communication, cooperation, and coordination among the programs. Each university also needs to evaluate the placement of university-based minority recruiting in terms of reporting, responsibility, and authority to insure the most effective use of talents and resources. Mediation programs that are designed to prepare students for success should be coupled with entry level assessment, and carefully coordinated, monitored, and evaluated. Budgeting for recruiting within academic units should be encouraged and supported, if these activities are coordinated within the university.

Recruiting methods at each of the three universities are designed well and are working. Recruiting needs to become even more aggressive, though; the Colleges of Law provide good examples of the results of traditional, but aggressive, recruiting techniques. Information and recruitment activities aimed at parents, recruitment activities tailored to specific minority populations and high school locations, and efforts to involve employers, community agencies, and community organizations in recruiting should be developed or enhanced.

University and program admission standards need to remain flexible; again, the Colleges of Law are good examples to emulate. The universities should encourage applications from those who do not meet standards and communicate to students that exceptions are possible, only if there are good mediation programs available. Finally, the availability of financial aid for undergraduates needs to be communicated, and, stipends for graduate students need to be competitive.

RETENTION

INTRODUCTION

As important as recruiting and enrollment management are in assuring minority student access to a university education, we shall have failed if the students we enroll do not have a good chance of completing their programs. Retention and graduation of a larger number of minority students are the ultimate goals of minority recruiting and enrollment management.

Effective retention programs, according to Tinto (1988), have several essential features:

1) the university is a social and intellectual community built upon interpersonal contact and mutual concern;

2) there is an institutional commitment to students;

3) the mission of the university stresses the goal of student education; and

4) the university is discriminating, but not discriminatory.

The university experience in terms of interaction and fit is one of three important variables that affect minority student retention as well (Gutierrez 1988). The other two variables are pre-collegiate experience and personal characteristics.

"Student departure" from a university takes many forms and has many causes, some institutional and some individual (Tinto 1988). From a student perspective, the major causes are academic difficulty, lack of academic and social adjustment, unclear goals, and lack of commitment to graduate. Extensive research on retention (Smith and others 1981) shows that different causes of student departure define different target populations for specific retention activities. But overall, social and intellectual integration heightens students' attachment to the university and strengthens students' commitment to graduate. Gutierrez (1988) calls this becoming connected, and suggests that minority students can become connected through frequent use of campus facilities, holding a job on campus, and through informal contacts with teachers and students outside of the classroom.

The degree to which institutions formally plan and organize their campus improvements is related to the success of retention efforts (Smith and others 1981). Some of the institutional environmental factors to consider in planning for minority student retention success are: institutional retention goals, leadership, and faculty support; a positive, non-discriminatory environment; and special retention efforts that integrate persons into the mainstream of academic life that begin with recruitment and early outreach and continue through the university experience (Gutierrez 1988). Gutierrez' (1988) literature review identifies the following factors that influence the effectiveness of specific retention programs; they should be:

1) comprehensive;

2) institutionalized;

3) situated well in the university organization;

4) staffed by competent and dedicated persons;

5) non-stigmatizing to the participants;

6) focused on the early college experience;

7) supported strongly by faculty involvement; and

8) monitored and evaluated systematically.

Academically, the curriculum needs to reflect minority students' cultures and world views.

Tinto recommends that the best investment of resources is in "frontloading of effort" (1988). He says, "This is the case not only because the greatest proportion of leaving occurs in the first year, but also because over half of all student leavings have their roots in the first-year college experience." Based upon experience, Tinto believes that the "expected range of gains in rates of student retention over a five year period is between 10 and 20 percent of the entering student body." The national average is about 47 percent for four year institutions (Tinto 1988). Institutions with selective admissions standards have 5 year graduation rates that are several percentage points higher (Church 1988).

OUTCOMES

Specific retention programs for minority students in Arizona universities are recent developments. The Arizona Universities' Study Group on Minority Recruitment and Retention, convened in 1983, documented only a few, unsystematic efforts. The "Study Group" recommended a systematic approach to retention for the universities, and the universities responded to some of the recommendations within a few years of the publication of the report, but many of the current retention efforts are new. The retention outcomes discussed below should be evaluated in this context. Outcomes of past and current retention efforts are discussed in two sections: Minority Student Persistence and Graduation Rates; and Degrees Awarded to Minority Students.

Minority Student Persistence and Graduation Rates

Three cohorts of new freshmen are analyzed for patterns of minority student persistence in and graduation from Arizona universities: a 1980 cohort from ASU (Table 6); a 1982 cohort from UA (Table 7); and a 1984 cohort from NAU (Table 8).

These particular cohorts are analyzed because they are available, relatively recent, presumably reliable, and, with the exception of the NAU cohort, they encompass a five year period. Since the data do not cover a comparable time period, conclusions about differences among the universities would be highly speculative. The fact that the data suggest overall patterns of minority student persistence and graduation rates is the most important and reliable conclusion to be drawn from the comparison.

The first pattern is that many new freshmen are taking a longer time to graduate than in past decades. Five year graduation rates are substantially higher than four year rates. The percentages of students still enrolled after five years suggest that graduation may be delayed even longer for some students, particularly Hispanic and American Indian students. There are also consistent patterns in five year graduation rates by ethnicity.

Graduation rates are very low for American Indians. Blacks and Hispanics also have low graduation rates. Asians have the highest rates of any ethnic group, including Whites.

When the retention and graduation data are re-expressed as "student departure rates" (percent not retained), they reveal some striking patterns (Table 9). After five years, 52 to 59 percent of the Hispanics, 64 to 75 percent of the American Indians, and 64 to 72 percent of the Blacks had left the institution they entered as new freshmen without graduating from it, compared to 30 to 47 percent of the Asians and 44 to 48 percent of the Whites. The largest share of the five year departures typically left after one year. After two years almost all of the American Indians who were not enrolled or graduated after five years had already left. Average second year losses for most other ethnic groups are also relatively high. The increases in Asian and Black students departures between the third and fourth years are also notable.

Data on student departures from Arizona universities support Tinto's (1988) observation that the reasons students give for leaving are numerous and varied. An exit interview survey conducted by Student Life at ASU during the fall semester, 1982, and a survey of students who did not return to NAU during the fall semester, 1987, conducted by Student Services, both document a similar variety of reasons for leaving, ranging from personal and financial reasons to academic reasons.

The NAU report is not tabulated by ethnicity. In the ASU study, the minority students who left reported the following reasons for their departure, in order of the frequency of response:

1) family problems;
2) money problems;
3) medical problems;
4) work conflicts;
5) accept full-time employment;
6) academic performance;
7) transferring to another school;
8) leaving the area.

These reasons are said to be fundamentally the same for other, non-minority students. Since the exit interview program was initiated at ASU in 1980, ASU Student Life reports that "money problems and work conflicts" are most frequently mentioned as reasons for minority student departure (Framework questionnaire response). The 1982 ASU Exit Interview Survey indicates that money and work were important reasons for leaving for all students, but that Black and American Indian students had more even distributions of responses over the major categories of "Money/Work", "Individual", "Family", and "School" than other ethnic groups, suggesting that these two groups face a broader range of difficulties.

Additionally, data on academic standing for the 1980 ASU cohort of new freshmen are indicative of a major reason for minority student departure. A little less than a third of the 1980 cohort who were not enrolled after one year also were not in good academic standing. The 1987 NAU survey mentioned above reports that about the same percentage of students who did not return were suspended or on

academic probation. The NAU survey does not further address these students. But among the new freshmen in ASU's 1980 cohort who were not enrolled after one year, 70 percent of the Native Americans, 48 percent of the Blacks, 42 percent of the Hispanics and Asians, and 30 percent of the White/Unknown ethnicity students were not in good academic standing.

In the study of students who did not return to NAU in the fall, 1987, semester, almost 60 percent of the students who were contacted (includes only students who were not on probation or suspended) were enrolled in higher education institutions; about half were enrolled in community colleges and about half were enrolled in four year institutions. So, when students depart, not all of them are lost to higher education. Information on "system-wide" retention, including ethnicity of students, needs to be gathered to assess the magnitude of retention in higher education in the state, since the ultimate object of retention is that persons become further educated (Tinto 1988).

Degrees Awarded to Minority Students

In 1986-1987, 10.8 percent of the undergraduate degrees at Northern Arizona University were awarded to minority students. Both Arizona State University and the University of Arizona awarded 9.1 percent of their undergraduate degrees to minority students during the same time period (Table 10). The percentages of undergraduate degrees awarded to specific ethnic minority students is a reflection of their relative representation in the headcount enrollments in each institution. For example, the largest percentages of undergraduate degrees awarded to minority students were awarded to Hispanics at all three universities. At NAU, the next in rank were degrees awarded to American Indians, while at ASU and UA the next in rank were degrees awarded to Asians, followed closely by Blacks.

There are substantial differences in the percentages of graduate and professional degrees awarded to minority students during 1986-87 at NAU and UA, compared with undergraduate degrees awarded to minority students in these same institutions; there are fewer differences at ASU (Table 10). The relative frequencies of degrees awarded, again, reflect overall enrollments.

Table 11 is an analysis of trends in bachelor degrees awarded to minority students by Arizona universities between 1982-83 and 1986-87. The combined figures show slippage in bachelor degrees awarded to American Indians and Blacks over this five year period, and gains in bachelor degrees awarded to Hispanics. These data support the retention trajectories discussed above. The institution specific data show that NAU needs to be concerned about their progress over the last five years in all categories, and that UA and ASU need to be especially concerned about their progress in graduating Blacks and American Indians. Minority graduation trends reported in the Arizona Board of Regents Minority Recruitment and Retention Report 1987, combine undergraduate and graduate degrees awarded over the past four years, and the trends show the same general patterns (ABOR 1987).

THE RETENTION ENVIRONMENT

A university retention environment is composed of several interconnected

parts (Figure 3), and it exists within the larger environment of the university's service community. Successful retention begins with early intervention and ends with graduation and placement. At both of these points there are important linkages with the community that the university serves. Assurance of financial security is particularly important at the point of access to a university.

Intellectual and social and cultural integration into university life contribute to students' feelings of belonging and their commitment to graduate.

Integration is mediated by interpersonal relationships with faculty and staff through advising and mentoring and career counseling. Finally, monitoring students' academic progress and evaluation of specific retention programs provide opportunities for further intervention and improvement of the retention environment.

A general interpretation of the retention environments of Arizona's universities is the subject of this section. The primary data are responses to questions in parts III-V of the Framework questionnaire. The interpretation is organized by components of the retention environment, rather than by university or by sections of the Framework questionnaire. Again, there are some missing responses to crucial segments of the questionnaire, so the data are not strictly comparable. Graduate and professional schools are discussed after the review of undergraduate programs.

Early Intervention

Early intervention programs are important bridges between minority student access, and persistence to graduation. They offer opportunities for improving academic preparation and competencies so that students meet entrance requirements, and for encouraging students to attend college, as well as opportunities for laying the foundation for success after entry.

The significance of intervention for recruitment and enrollment management was discussed earlier. Early outreach, partnerships with public schools, and bridge and transition programs also address two important variables that affect minority student retention -- pre-collegiate experience and personal characteristics. So, at the risk of some repetition, these programs are briefly reviewed again here. Responses to Framework questions A and B in section III (Appendix A) are the primary source for the review. There are no answers to these questions for ASU, but some pertinent information is available from interviews and responses to other questions.

Responses from NAU and UA indicate that special relationships with secondary school counselors are cultivated to enhance professional guidance. All three universities involve minority students in the process. All three universities also have early outreach, summer bridge, and transition programs, including some pre-college programs administered in academic units.

Examples of early outreach include: APEX and MESA at UA; Project Prime and "2+2+2" at ASU; and Talent Search and the Macy Foundation Project at NAU. Upward Bound, a federally funded program, provides pre-collegiate experiences at all three universities.

Summer bridge or enrichment programs include: New Start (UA), STAR (NAU),

and STEP (ASU). On-campus visitation and registration days and new student orientation have some minority student emphases at NAU, ASU, and UA. The effects of these programs on minority student retention are currently being evaluated at each institution. The programs that prove successful should be retained and enhanced,. Special consideration should be given to the financial stability of the programs, since many of them currently depend upon federal or other grant funds.

Financial Aid

Financial assistance is a major factor in access to a university education for many minority students, in addition to its contribution to persistence to graduation. In the retention environment, therefore, financial assistance planning should be closely tied to early intervention programs. The Framework questions that concern financial aid may be grouped into four categories: packaging of aid; communication and assistance; work assignments; and an assessment of barriers.

All three universities assign a high priority to the use of institutional student financial aid funds to supplement student assistance from federal sources for needy students. There are several non-federal sources of institutional financial aid funds available, including private scholarships and grants, waivers, short term loans, and student employment. Much of this aid is targeted to minority students. A major concern in developing a financial aid package is in reducing students' potential loan obligations, and institutional scholarships and grants are the principal means of doing so. Financial assistance staff at NAU, ASU, and UA routinely provide individual counseling sessions and solicit advice on the adequacy of financial aid packages. The financial assistance offices also have appeal processes for reevaluating the adequacy of financial aid packages, and counselors are authorized to make adjustments, with appropriate documentation. Each university has a short term, emergency loan program to meet unanticipated student needs.

A concern was expressed in campus interviews that minority students tend to apply for financial aid after deadlines, for a number of reasons. The universities make extensive use of media, special publications, presentations, and personal letters to remind students that they must apply for financial aid, and that there is a deadline for application. At UA, for example, there are 25 on-campus information sessions during the year, and 20 to 30 information presentations off-campus. Reminder letters are said to be effective in increasing the number of timely applications. Northern Arizona University and ASU both keep some institutional student financial aid funds in reserve throughout the summer for unusual situations. The University of Arizona relies upon general student employment opportunities to meet the needs of late applicants.

Financial counseling helps to encourage timely applications, and to assist students in managing their financial affairs. Arizona State University has embarked upon a special effort to educate students about their financial obligations and responsibilities, including information about budgeting and after-graduation obligations. Northern Arizona University has a "Coordinator for Minority Student Aid" who is responsible for counseling minority students. The University of Arizona has an extensive training program in financial aid matters

for persons who come into contact with minority students in recruiting and retention activities. NAU and UA report an increase in on-time applications as a measure of the effectiveness of their financial counseling efforts.

The "Self-Help" portion of a student's financial aid package can be on-campus work, and both ASU and UA encourage students to work to reduce loan indebtedness. The literature indicates that working on campus enhances minority student retention. ASU reports a special program to encourage administrators and faculty to employ needy and minority students, in recognition of the importance of on-campus work for retention. In all three universities, work assignments are usually at the request of individual students, and financial aid officer can encourage, but not require students to work in areas related to their academic major or career.

Financial aid barriers to minority student access and persistence reported by the three financial aid officers include: the complexity of the application process; late applications; and problems, or perceptions of problems, of indebtedness. The first two barriers are being addressed with several initiatives, discussed above; the last barrier is being addressed in part by attempts to include a greater proportion of scholarships and grants, and "Self-Help" through work, in students' financial aid packages. In the case of NAU,

> "The adequacy of the aid package in meeting each student's real need is determined by the sufficiency of funds in the right programs. There are never enough gift aid funds (grants and scholarships) to meet the documented financial need of our aid applicants, despite our policy of attempting to meet half of the student's need with gift aid."

Scholarship and grant resources need to be increased, and alternative means of financing a college education, such as loan forgiveness and overmatching, need to be explored.

Intellectual Integration

Integration in this context means becoming part of university life, becoming "connected" to use Gutierrez's (1988) term. Intellectual integration occurs when students know they can do the work, find the academic environment stimulating, and become excited about learning. The curriculum and faculty are obviously key components in the process of becoming connected, but students' preparation and motivation are equally consequential.

Support services for students, that deal with preparation and motivation, are usually located in student affairs divisions of a university, while curriculum and faculty are concerns of academic affairs divisions. There are critical areas of overlap in intellectual integration goals and objectives between these two fundamental domains, particularly between academic support services and academic curriculum and faculty.

This section is a review of some significant features of academic support services and curriculum, and bridges between the two, with special reference to minority students. It does not discuss basic skills (Language and Mathematics) courses. See Church (1988) for an evaluation of basic skills programs in the three universities.

Academic Support Services

Academic support services, predominately skills development and tutoring, are generally functions of student affairs offices and programs, and they are often combined with student personal development programs that deal with broad concerns of student integration into university life. Specific areas covered by Framework questions include: study skills development and tutoring; stigma attached to participants; staffing and performance evaluation; and program administration.

At UA study skills development and tutorial services are provided by the Academic Learning Skills Center, which provides services to all students, including minority students, and the Office of Minority Student Affairs. All minority students receive a mailer that invites them to attend specially designed orientation sessions that provide information about services.

Arizona State University provides tutorial services through their Educational Support Program, and they report a high demand for services. Study skills are developed in a "University Adjustment and Survival" course taught by the College of Liberal Arts and Sciences, and in four "adjustment" courses offered for ethnic minority students by the Minority Assistance Program. Students who may need academic support services are identified prior to entering ASU by recruiters and admissions officers. After the first semester, grade point averages are used to help identify potential users. An "Early Warning System", with participation by professors, is available for Minority Assistance Program participants.

The Learning Assistance Center at NAU is the primary center for all academic tutoring and skills development. The demand for these services is high. There is a university "survival" course taught in the College of Education. A federally funded program, the Student Support Services program, furnishes tutoring and skills development through the Learning Assistance Center.

Referrals from other programs, such as the Multicultural Center, and mailings help identify participating students. NAU is beginning to make initial contacts with potential participating students in the summer.

Student affairs personnel in all three universities are sensitive to the potential for stigmatizing students who participate in developmental programs, and there are conscious attempts to keep stigma to a minimum.

First, there are attempts to provide a non-stigmatizing environment, such as a favorable location on campus, and to develop a broad base of student participation.

Second, the course work is carefully designed for skills development and adjustment, rather than "remediation".

The majority of support programs in each university are staffed by student affairs staff, rather than by regular faculty. There are some faculty based programs, such as "skills" courses, and some regular, tenure-track faculty participation in other programs. Student affairs staff may have faculty associate appointments in various colleges.

Evaluation and merit awards take place through regular personnel performance evaluations. Persons who teach also are

evaluated by their students. In all three universities, support service directors are said to participate in decision making and policy, and to be influential in setting policy. Participation is through regular meetings and delegation of responsibility and authority. Advisory boards with student representation, and program evaluation provide student insights.

Curriculum

Academic curricula that address minority interests and needs are integral parts of university retention environments that attempt to integrate minority students into university life. The Framework questions dealing with curriculum were asked of academic affairs officers who are directly responsible for undergraduate programming in their institutions. Questions cover the status of ethnic and cultural studies, how the curriculum is assessed for works by minority authors and works focusing on minority concerns and experience, library and bookstore holdings on minority affairs, and how the impact of changes in curriculum are assessed for their influence on the education of minority students.

At NAU, "There are no active ethnic studies programs." There are courses with ethnic and cultural content in several departments, but there are no special attempts to publicize them.

Most departments in the social sciences and humanities at ASU have courses that could be identified as ethnic studies offerings. The respondents identified a weakness in Native American studies, where, it is said, there are few faculty and there is little effort toward interdisciplinary work. The courses are publicized like any other course.

Ethnic and cultural studies are both accepted and stable at UA, where Mexican American Studies, Native American Studies, and Black Studies have been part of the institution and curriculum for many years. These programs are financially stable, with funding from the state. Black Studies is the least developed, because of difficulties in hiring Black faculty. There are additional ethnic studies courses in other academic units. Courses are publicized through the catalog, course schedule, and by "fliers".

Assessing the regular curriculum for adequacy in the study and analysis of works by minority authors and works focusing on minority concerns and experience is reported to be especially relevant in the humanities, fine arts, and social sciences at UA. In their new General Education program, in one of the required study areas, one course "must focus systematically on gender, class, race or ethnicity." Works of two of their well-known minority faculty members are used widely on campus.

Arizona State University is described as "relatively well off with regard to the curriculum and minority content." The curriculum is related to faculty interests and skills at ASU, hence it is an affirmative action concern there. The Interdisciplinary Humanities Program is regularly reviewed for a balance of minority concerns.

There are opportunities for assessing the curriculum for minority works and content at NAU, but there are no assessment criteria.

Of several special collections established at ASU's library in the 1970s, only the Chicano Studies Collection remains, although there are attempts to keep the

other areas current. The Native American collection is said to be weak. Strengths reflect faculty interests. "The ASU Bookstore does not get good marks".

Northern Arizona University's academic affairs officer says that the library and bookstore regularly carry publications by minority authors and works focusing on minority concerns.

The bookstore at UA makes an attempt, through a periodic inventory, to see that works by minority authors and works focusing on minority concerns are well-represented. The UA library systematically collects works that address minority issues, at research and general levels. In fact, it is reported that such works are a "collection priority", especially in the "Native American" and "Hispanic-American" areas.

At ASU, "Changes in the curriculum and teaching methods are not assessed to determine their influence on the education of minority students." However, the Task Force for Assessing Undergraduate Education will make it an assessment criterion. The educational needs of minority students are considered in several courses taught by student service personnel at ASU as they are at UA and NAU. "Attempts have been made to study the learning styles of Native American students" at NAU. The University of Arizona response is relatively silent on curriculum assessment in relation to minority education.

Bridges

Academic support services and the academic curriculum should have the same objective: intellectual integration of students into university life. Therefore, there are important opportunities for bridges between student services and academic affairs, especially in curriculum and teaching. One opportunity is in offering support service courses for academic credit, and in involving faculty in teaching these courses and in tutoring; another is in sharing successful teaching techniques; still another is in closely correlating subject matter.

Most academic support service courses are offered for credit at NAU. Courses offered by the Minority Assistance Program and the "survival" courses offered by the College of Liberal Arts and Sciences at ASU are credit courses. ASU's respondent says, in support of this policy, "Offering these courses for university credit is the best way to attract students to take these critical classes."

The Director of the Academic Learning Skills Program at UA teaches a credit course. Student Affairs personnel at UA feel a growing need to conduct support courses for credit, and to further involve regular faculty. With a few exceptions, most academic support services courses are taught by student affairs personnel in all three institutions.

The response to the question, "How closely related are the subject matter and teaching methods of the regular curriculum to the subject matter and teaching methods of support service courses", produced the following responses: "There is not a great deal of systematic coordination between the regular curriculum and the curriculum offered by Student Services" (UA); "Overall, there seems to be very little interaction between Academic Affairs and Student Affairs when it comes to minority issues (ASU)." There was no response to this question from NAU. The support service courses at UA

generally enhance the regular curriculum. At ASU, the respondents said that there are few links between regular faculty and the Minority Assistance Program.

The opportunity to share effective teaching techniques is not generally taken advantage of. At ASU, "the faculty does not seem to be either aware of the content or effectiveness of these courses [support service courses]." At UA, support service course do not become part of regular curriculum: however, individuals from Student Affairs and regular faculty are currently collaborating to develop a freshman "survival" course (University 101). NAU provided no response to the question concerning coordination.

Observations

Tutorial services are in high demand, according to the information provided in responses to the Framework questionnaire, and there is concern that some students may not be able to find tutors. Regular faculty do not generally participate in tutorials, and some academic affairs personnel are concerned about the academic content of tutorial sessions, in terms of relevance and rigor. Some student affairs personnel are concerned that faculty do not generally participate in tutorials.

How offices and programs that deliver academic support services coordinate their efforts needs to be examined; some programs are designed specifically for minority students and others for all students. In the words of an administrator at ASU: "Minority programs simply cannot and should not be expected to respond to a concern that should be assumed by the entire university." The importance of early identification of potential problems and early intervention is recognized in all three institutions, but it appears that some work remains to be accomplished in this area. The importance of a non-stigmatizing environment for academic support services is also recognized. However, the juxtaposition of minority affairs centers and counseling as well as other services that deal with student "problems" that occurs in each institution, may be sending a negative message.

The impact of the curriculum on minority education needs some basic attention. Courses that treat ethnic and cultural diversity need to be identified, or developed if necessary. Some consideration should be given to publicizing ethnic and cultural diversity courses and to incorporating them in programs of study, such as "general" education requirements. Some means of assessing the "diversity" content of new or revised courses, where appropriate, would help in developing a curriculum that better reflects the university's service environment and the composition of its student body.

One of the most critical questions that the universities need to ask themselves is: How can student affairs personnel and faculty join forces to address the issues of retention? The data clearly indicate that the necessary bridges do not exist. A large part of the problem is a general lack of faculty involvement in student development outside of the classroom. Another large part of the problem is structural and administrative. Stodt and Klepper's recent collection, entitled, "Increasing Retention: Academic and Student Affairs Administrators in Partnership" (1987), could be a starting point for dialogue that could lead to better bridges and,

most importantly, to better retention.

Social and Cultural Integration

Programs, policies and procedures designed to foster social and cultural integration of minority students into university life have to start from the recognition that universities are distinctive cultural systems, some aspects of which are unique to specific institutions, as well as the recognition that students enter the system as participants in one or more "home" cultures. This cultural field is also relevant to intellectual integration. But cultural differences and similarities are particularly evident in social interactions of students with staff, faculty, administrators, and each other. Lack of sensitivity in these interactions and lack of participation in the social life of a university can be as discouraging as failure to achieve academically, and can equally contribute to early departure.

Current university programs, policies, and procedures designed to foster social and cultural integration of minority students are reviewed as two topics: sensitivity and social life. Framework questions that deal with these topics are found in section V.; the Deans of Students were asked to respond to them. There is no response from NAU.

Sensitivity

Institutional responses to the issue of sensitivity in cross-cultural interpersonal relationships are the subject of three questions in the Framework questionnaire. The first question asks for information about institutional programs for reducing prejudice, and institutional responses to incidents of prejudicial behavior. The second query deals with complaint and grievance procedures for students, whether minority students use these procedures fully, and how institutions attempt to resolve minor and major problems that might lead to withdrawal. The last question asks about general processes of review of campus customs and rules of conduct for their "receptiveness and congeniality to minorities."

Arizona State University's "Personnel Training Department" has a group training program to reduce prejudice and develop sensitivity, entitled "cultural awareness," that is facilitated by a panel representing the major ethnic groups on campus. It focuses on interpersonal relationships. Their standard institutional response to incidents of prejudice is to take corrective action immediately and to "counsel and/or discipline the offending party." The "Student Affairs Staff Development Committee" at UA, constituted this past academic year with the theme of "appreciation of diversity". They held five sessions with staff to increase understanding of minority student needs, perceptions, and feelings. The University of Arizona also has recently appointed three assistant Deans of Students with special responsibility for Native Americans, Blacks, and Hispanics, and they have begun a program on ethnocentrism led by one of the assistant deans. The Affirmative Action office at UA also holds seminars.

The Dean of Students office at UA is in the process of "reinforcing informal networks" to report incidents of prejudice and to gain the confidence of minority students that their complaints will be taken seriously.

Both ASU and UA have numerous complaint/grievance procedures that are available to students. The Dean of Students office at UA believes that "there

should be more complaints filed than there are." This is partly a problem of information, and the Dean of Students at the University of Arizona has prepared a series of bookmarks for students that identify procedures and how to use them. They are looking to the Assistant Deans for help in identifying incidents that need to be resolved, and they are working in the residence halls to identify informal channels to try to help avert withdrawals. Additionally, UA is currently evaluating training programs offered through the residence halls for what needs to be included to reduce prejudice, and they are initiating special recruitment programs for minority residence hall personnel. Residence Life at ASU has a "Human Rights Task Force" charged with reviewing student complaints and concerns, and the residence hall staff are "trained to be specifically sensitive and responsive to minority concerns and are well represented ethnically." ASU handles and resolves problems as close to the source as possible. Appeals and grievance procedures and staff are available widely, but "While Student Affairs and minority staff are available throughout the division to students facing major decisions, often they are not consulted before students withdraw."

The University of Arizona reports a similar problem: "Yet, we know that students do withdraw as if they have not found a listening ear." Both UA and ASU report that major problems, such as unfair treatment, are dealt with promptly when brought to their attention.

Neither ASU nor UA report general institutional processes of review of campus customs and rules of conduct for their receptiveness and congeniality to minority students. At ASU there are several boards and committees that are sensitive to the needs of minority students, most notably a "Minority Affairs Council" that has members from the service community. The Human Rights Task Force in Residence Life has the task of working on minority student issues as a current project, and it is in a position to recommend how the social environment might be made more congenial to minority students. At UA, the Vice President for Student Affairs recently instituted two support groups for Blacks and American Indians that include community, university, and student members. One of the support groups' concerns is the treatment of minority students. The concept of a "special admissions day" for Blacks was a recommendation of the Black support group, for example, and the concept has been extended to include a special day for Hispanics and American Indians. The general student Code of Conduct is under review at this time by all three universities, for all students.

Social Life

Universities have some control over student social life by monitoring campus organizations and campus extracurricular activities, and through their sponsorship of student entertainment and activity programs. Minority participation and interests in these three areas are the subject of the Framework questions that directly relate to campus social life.

"All clubs and organizations must incorporate a non-discrimination clause into their constitution," at the University of Arizona. The constitutions and their implementation are monitored, and there is a university discrimination complaint procedure that is student initiated.
"Vigorous action has been taken when incidents of discrimination have been reported." Some positive signs of

congeniality to minority student concerns are evident in the Associated Students of the University of Arizona's last Homecoming exhibit, which was planned by the organization's Minority Action Council. The University of Arizona does not currently have detailed statistical data on minority student participation in campus organizations or in extra-curricular activities. Efforts to increase minority student participation are notable in the area of student leadership. The UA's summer bridge or enrichment program, New Start, has a leadership training and networking component called: "New Start Senate." This component is a cooperative effort of the student government and the Office of Minority Student Affairs. New Start senators plan a social activity and work with Associated Student leaders and they are introduced to the Minority Action Council. There have been some significant successes in getting New Start Senate participants involved in student government.

At ASU, "All student organizations officers sign a pledge of non-discrimination when they register their organization with the University. This pledge is reiterated when the organization requests funding support from Associated Students (Student Government)." There is a Minority Cultural Affairs Board in Student Government that sponsors and supports activities that make the campus more congenial to minority students. Associated Students actively recruits minority students for jobs annually. Minority students from ASU's Leadership Scholarship Program have been very successful in participating in student government. ASU's response documents minority student participation in various extracurricular activities and refers to a large number of active minority campus organizations -- for example, the Hispanic Business Students Association. In addition to the Leadership Scholarship Program, there are other leadership training programs that have minority student participation.

In an effort to ensure that student entertainment and activity programs include activities that feature minorities, and that reflect minority student interests, ASU has developed a "Cultural Diversity Committee" in Student Life "designed to aggressively implement literature, art, music and dance programs that are cross-cultural and reflective of the interests of minority students, faculty, and staff." The Cultural Diversity Committee's activities are funded by state appropriations.

At the University of Arizona, several programs and colleges regularly bring minority artists and scholars on campus; a recent example is a writers series by the Poetry Center. Until recently, most student activity has been left to student leadership. Recent developments include a Martin Luther King Day Planning Group and the Minority Action Council's sponsorship of a "Cultural Awareness Week." During the 1987-88 academic year UA instituted a university "Program Council." One of the goals of the Program Council is to sponsor programs that represent cultural diversity.

Observations

A lot of attention is being given to social and cultural integration of minority students and its impact on retention at Arizona State University and the University of Arizona. Much of the activity on both campuses is very recent, hence it will take some time to see the effects. Some programs, for example

student leadership training and community support groups, are working well already. Developing a campus culture that signals welcome and responsiveness is a campus-wide project; faculty as well as staff and administrators need to become involved in the effort. The Dean of Student Life at ASU says it well:

> "Persistence of minority students goes beyond the co-curricular activities and services of Student Affairs. It relates to all parts of our campus environment and requires a total institutional commitment."

Staff efforts appear to be underway, but I do not have any information about faculty involvement.

There is still considerable concern at all three universities about lack of sensitivity and there is still a perception that campus activities "are for whites", base upon interviews I conducted during the spring semester, 1988 (Wood 1988). As the Dean of Students from the University of Arizona says:

> "We do need to gain better understanding by surveying staff and leaders about actual participation rates across clubs and organizations. We need to ascertain if underrepresented students participate only in minority student organizations, how well minority students are represented in governance councils, living units, student government, and council groups."

Also, further enhancement and development of sensitivity training for faculty, staff, and administrators appears to be called for, especially training in how to build and fulfill trust. And, part of the answer to negative perceptions lies in developing a more diverse faculty, staff, and administration.

Special consideration needs to be given to "Becoming aware of those hidden cases of students [who] simply walk away rather than letting us know how unfriendly an experience they have had here."

Advising

Advising can be a key link that facilitates both intellectual integration and social and cultural integration of minority students into university life. Advising is the major opportunity for faculty and student interaction outside of the classroom. Faculty should be well-qualified to offer advice about academic programs and concerns, and in their interactions with students they could help create a sensitive and welcoming environment for learning.

Two questions in the Framework questionnaire deal with advising. One asks if "there are institution-wide attempts to ensure that the academic advisors assigned to minorities are sensitive to the emotional and academic needs and the cultural backgrounds of the minority student, especially during the first year," and how the assignments are monitored. The other asks if academic advising, career counseling, and placement functions could and should be better coordinated, and if this matter has been addressed. The directors of university advising centers at NAU and ASU, and the Director of the Student Resource Center at UA responded to these questions. The "Report of the Task Force on Academic Advising, University of Arizona, March 2,

1987" was also consulted.

Academic advising for declared majors who are accepted into programs is based in the colleges and schools at all three universities. NAU and ASU also have university advising centers for undeclared and unclassified students. UA advises the latter in the College of Arts and Sciences. There are also minority student advisors in the Multicultural Center at NAU, and in the Office of Minority Student Affairs at UA.

I have very little data about college based advising for minority students, except for the information that some colleges provide special advising efforts.

In NAU's University Advising Center minority students are "mainstreamed"; if they need special attention they are referred to the Multicultural Center, which is next door. Advising Center advisors are trained in academic advising, but "We make no effort to train them regarding special needs." ASU's University Academic Advising Center functions to supplement and complement advising in the colleges.

The Advising Center's staff advises students who are undecided, undeclared, unclassified, and visiting ASU. Students who used the center the first year of its opening, 1986-1987, gave the center extremely high ratings. ASU's advising center attempts to meet the needs of minority students who use its services by having a culturally diverse staff. Undecided students at UA are advised in the College of Arts and Sciences. Students with special needs, including minority students, are directed to other parts of the university. The Task Force on Advising at UA recommended a university advising center.

Arizona State University's respondent believes that career counseling, academic advising, and placement functions are well coordinated at ASU. At the University of Arizona, the Student Resource Center in Student Affairs has developed an "Orientation, Advising and Retention" office to coordinate university wide concerns in these areas. The Student Resource Center has also requested the Provost's office to establish a Task Force to study campus wide "career resource and placement needs." At Northern Arizona University career counseling and placement reports to the Vice President for Student Affairs, the advising center reports to the Vice President for Academic Affairs, and the advising centers in each of the colleges are funded by the Deans. NAU is "exploring the possibility of centralized advising for all students until they declare a major and are accepted" into a program where they would be assigned an advisor.

Observations

Advising is a major opportunity for faculty to become involved in student development and retention efforts. The implications of academic advising for minority student retention need to be carefully considered at all three institutions. Faculty should participate in cultural diversity and sensitivity training so that this opportunity is maximized. Existing programs for staff development could be extended to the faculties.

Advising, career counseling, and placement are closely related concerns, from a student perspective. Some thought needs to be given to how these functions might be coordinated to better serve minority student needs.

Career Counseling and Placement

Career counseling and placement are important services for student retention. The Director of Career Services at ASU tells us why: "Career Counseling often assists students in gaining a sense of purpose and direction in their educational pursuits."

Unclear goals and a lack of commitment to graduate are one of several causes of student departure, and services, such as career counseling and placement, that assist students in developing educational goals can contribute significantly to increasing student retention and graduation rates. The first Framework question that considers career counseling asks about the role of career counseling in student support, and if minority students use the support mechanisms. The second asks about summer employment opportunities; the stress on career coordination in summer employment; and whether minority students use the summer employment services fully. A third question deals specifically with placement services and their utilization by minority students.

Finally, the question about the coordination of advising, career counseling and placement discussed under advising is revisited. The Director of Career Services responded to the questions for ASU. At NAU and UA the questions were answered by Student Services administrators.

There are several opportunities for students to learn about career planning at ASU: courses are taught in career planning every semester; English 101 and the university "survival" courses have a career planning component; testing services are available; and students may make individual appointments for career counseling. ASU has a Career Development Center with interactive computer guidance programs, and special publications targeted to minority students. Minority student participation in the use of the computer facility is good (17 percent). There are several career programs in the academic areas as well: for example, the Hispanic Business Program. There are several efforts to specifically target minority students for career counseling. Letters are sent to freshmen and sophomore minority students inviting them to participate in an IBM sponsored leadership and career planning program.

Minority students are also sent letters inviting them to register for ASU's Career Coordinated Employment Program. Career Services also makes presentations to clubs and associations.

"N.A.U. recognizes career planning and placement as a major retention tool for students." NAU's university "survival" course, which is required for undecided students and for students admitted with exceptions, covers career exploration in addition to an orientation to the university. The Career Planning and Placement Office helps in the course.

There is a "satellite" office of Career Planning and Placement next to the Multicultural Center at NAU to assist undecided students advised in the Advising Center and to assist minority students. The use of the satellite center by minority students reflects the percentage of minority students enrolled in the university. Career Planning and Placement Office staff make career planning presentations to classes and in residence halls. NAU also has a career peer counselor program to assist students.

At UA, staff of the Student Counseling Service and the Career and Placement Service counsel students about careers. "We feel that minority students use these services but we need a more proactive posture." The University of Arizona is planning a University 101 ("survival") course with a career guidance component, and staff of student affairs have requested a university wide study of career planning and placement activities. A task force last year developed a generalizable model within the Psychology department for informing minority undergraduates about graduate training.

The student employment office of financial aid is the "central location for student employment" at NAU. Jobs, including summer jobs, are posted there.

Residence life is one of the largest on campus summer employers, and staff actively recruit minority students. The Multicultural Center and Student Life are referral agencies for minority student employment. Students are encouraged to seek employment which is a "good fit". Student employment at NAU "is an area which could benefit from a better coordinated effort for placement of students."

The Job Center in Career and Placement Services at UA serves a very high percentage of minority students (32 to 38% of the users are minority students).

There are summer opportunities listed, and the academic colleges also offer employment opportunities. Use of the job center is encouraged by student affairs ethnic staff mentors and through publicity. Asians make the best use of the services and American Indians make the least use of the services. "We, obviously, need to work more on this issue." The Office of Minority Student Affairs works directly with corporations to identify minority students for summer internships.

At ASU students are helped in finding summer employment and internships through Financial Assistance, Career Services, Cooperative Education, and academic departments. Cooperative Education, the Internship Program, and Career Coordinated Employment help students find employment related to career interests. There are special efforts to reach minority students. Letters inviting participation in the Career Coordinated Employment Program were mentioned previously. Student assistants also make presentations to clubs and associations about the program. In April of this year, 14.5 percent of the students enrolled in the program were minority students. Financial Assistance has a summer job fair in March of each year, and employers are encouraged to come to campus to recruit students for summer employment.

Placement services at all three universities are in the same office as career counseling. Prospective employers and recruiters must agree to Equal Employment Opportunity recruiting, and efforts are made to monitor "inappropriate recruiting practices". Fifteen percent of the students who use Career and Placement Services at UA are minority students. Major corporations also make contact with the Office of Minority Student Affairs to recruit UA minority student graduates.

At ASU, Career Services assists with full-time employment upon graduation, and Financial Assistance and Career Coordinated Employment assist with part-time employment. Career Services

at ASU distributes a list of minority clubs and associations to employers, and offers the clubs and associations workshops and encourages them to keep resume books. Through the Career Coordinated Employment Program, students are encouraged to register with placement early. Placement records are maintained, and the office makes regular contact with registered students. Minority students make up 12.5 percent of the students registered for placement at ASU.

The Career Planning and Placement Office at NAU and potential employers make direct contact with the Multicultural Center for recruiting. It is said that a high percentage of minority students receive offers. There is "no indication of ethnicity" on Career Planning and Placement Office records. NAU provides potential employers with a list of minority student clubs and associations and specific visits are made to the student groups. An externally funded graduate assistantship is designed to assist minority students with placement and career counseling.

The UA has coordinated some efforts in these areas, as mentioned previously, and there are plans to study career planning and placement university wide.

The spatial association of the Academic Advising Center, the Career Planning and Placement satellite office, and the Multicultural Center at NAU encourages informal cooperation. "However, this is an area which could be improved over the coming years." Career Planning and Placement and academic departments cooperate during Career Day each fall at NAU. At ASU, there are liaisons with colleges and Career Counseling and Placement, and the Career Development Center is located between the Counseling and Consultation and Career Counseling and Placement Offices, encouraging cooperation between the two staffs.

Observations

Where data are available, minority student participation in career planning and placement programs is very good. Data from the University of Arizona suggest that there may be differential participation by ethnicity, so that additional work may be needed to encourage greater participation by some groups.

There are some good career planning and placement programs in one or more of the three institutions that could be profitably adopted or modified. For example, ASU's Career Coordinated Employment Program has many of the elements that contribute to better retention, such as early intervention, proactive recruiting for the program, and continuity with post-graduation placement.

"Obviously, the better coordination there is of services, the better a student is served." (Career Services Director, ASU).

The respondents suggested several areas, indicated above, where better coordination could be helpful. One of the benefits of coordination, from a retention perspective, is what the University of Arizona respondent calls "continuity of contact".

Monitoring and Evaluation

Monitoring student progress and carefully evaluating retention policies, procedures, and programs can contribute to better retention and improve student performance if the data

are used to modify, eliminate, or create policies, procedures, and programs. Responses to questions discussed in this section cover monitoring and evaluating student progress, and retention efforts and research. There is also a general question about the emphasis placed on institution wide procedures to improve student persistence, and the roles of department heads and administrative staff in the process. The questions were directed to administrators in student affairs. Two of the three Framework questions, Section V, A and B, have no response from NAU.

Students' academic progress in universities is generally measured by the grading system and grade point averages. At UA, a Student Outcomes Task Force recently developed recommendations for measuring student progress that would also include personal development and growth. The UA respondent reports that the recommendations are in the process of implementation. The effectiveness of student support services courses at UA is measured by pre- and post-tests and by student evaluation. A writing competency test is administered at the junior level at UA. The response to a question about what is known about the academic progress of minority students at the University of Arizona is: "We are currently in a position to know which minorities make good academic progress and which do not." Special support services for students for whom English is a second language are provided in English as a Second Language (ESL) programs at all three universities.

Northern Arizona University monitors students who are "at risk" of withdrawing, early in their university experience. Students who are admitted provisionally are contacted through the Multicultural Center. There they are given individual staff attention, and the Multicultural Center staff monitors the students' academic progress by requesting faculty to send progress reports to the Center.

The Center staff may also contact professors directly. A program initiated in the summer of 1987 attempts to contact students who are on academic probation. Students at NAU demonstrate their competency by successfully completing the university Liberal Studies requirements, including Math and English. In addition, academic programs may have program prerequisites and placement or entrance exams. There is no response from NAU to the question about how much is known about the academic progress of minority students.

The response to this particular set of questions from ASU is very general, and the respondent recommended that the questions be redirected. The person to whom the questions were redirected did not respond. The following discussion, as indicated above, does not include responses from NAU.

Universities are in an excellent position to research the causes of minority student attrition in their institutions and to incorporate the results into their retention programming. The Office of Institutional Analysis at Arizona State University conducts periodic studies on persistence, graduation, and academic success of all students; they do not research the causes of attrition. Student Life at ASU has had an Exit Interview program since 1980. In a 1982 study, they found that the reasons for attrition were "fundamentally" the same for minority and majority students. The

reasons for withdrawing most frequently mentioned by minority students since 1980 are "money problems and work conflicts".

In 1985, Student Affairs offices at the University of Arizona initiated an on-going study to investigate student satisfaction with their university experience during the second semester of their freshman and junior years. This cooperative effort is funded by Student Affairs and the office of Academic Affairs concerned with undergraduate education. The Student Affairs Research Office is currently analyzing retention data. There are also several studies on the "efficiency" of tutoring, peer counseling, early outreach and summer bridge programs. The main factors responsible for attrition at UA are the same for minority and majority students.

> "However, late planning for higher education, students not getting adequate information, failure to meet priority service deadlines, lack of exposure to those who have attended college, are factors which particularly influence minority student attrition."

The last question included in this section asks: "How much emphasis has been placed on developing institution wide procedures to improve minority student persistence?"; and "What are the roles of administrative staff and department heads in this process?" "There has been consistent effort at the University of Arizona to disperse responsibility for improving minority student persistence across the university." Student Affairs Research at the UA is analyzing retention data and sharing it with academic departments and colleges, for example. "This process places accountability for addressing retention issues at the college and departmental levels." Student Affairs offices and programs work cooperatively on retention issues at UA. There is academic involvement in a "Writing Skills Improvement Program"; departmental representatives help in summer bridge programs; and academic research centers conduct retention research.

Arizona State University is committed "to improving minority student persistence. Many efforts have been made by individual departments in both Student Affairs and Academic Affairs to promote a campus climate where minority students feel welcomed, appreciated, and encouraged to excel."

Administrative staff and department heads are expected to give a high priority to affirmative action goals, and Student Affairs administrators are encouraged to involve minority students in programs and to be sensitive and responsive to minority student concerns.

ASU's Minority Student Orientation program for students and parents involves faculty and administrators. Students are involved in the Associated Students' Minority Cultural Affairs Board. Student Affairs staff are involved in specific retention programs and in the Cultural Diversity Committee.

Observations

Peter Ewell, in his report to the EEC Task Force, cites research that indicates that:

"Student assessment programs have also been widely associated with gains in student persistence and graduation. This is due primarily to two different mechanisms. At the level of individual courses, coupling assessment of pre-

requisite skills with course registration policies can result in significant increases in success rates. ... Second, institution-level assessment results -- particularly the results of student attitudinal and perception surveys -- can result in documentable increases in overall rates of student retention and degree completion" (1988:18-19).

The University of Arizona's "satisfaction" survey falls into the latter category. Northern Arizona University has recently conducted a university wide student needs assessment survey, specifically designed for ascertaining minority student needs. All three universities have assessment and placement in basic skills courses. The three universities should consider additional diagnostic assessment and university wide attitudinal and perception surveys as tools for retention.

Monitoring minority student progress with appropriate intervention, especially early intervention like the program at NAU, also should help improve retention. On-going student retention research and careful evaluation of programs need to be continued or initiated, as the case may be. Further cooperation across departments and divisions, and university wide coordination of retention efforts are essential for maximizing minority student retention and timely graduation.

Community Service Programs

A university's retention environment is embedded within its service community. Staff, faculty, administrator, and student involvement in community service programs demonstrates concern for the welfare of minority communities and establishes linkages that can help with the preparation and support necessary for university success. The relevant Framework question asks: "Is it institutional policy to demonstrate concern for the welfare of minority communities in the region through operation of various community service programs?"; and "How are minority students and faculty involved in these programs?" The question was asked of Deans of Students. There is no response from NAU, although responses and to other questions touch upon the same subject.

All three universities have forms of community outreach that involve university personnel; staff, students, and, sometimes, faculty and administrators. Public school intervention programs, cooperative education and internships programs, student volunteer work, recruiting programs, active participation in United Way, participation in fund raisers for community organizations, speakers bureaus, and community advisory boards are good examples of community outreach by Arizona's universities that impact upon minority communities. Two innovative programs were mentioned in the responses from ASU and UA. ASU participates in a "Hispanic Mother-Daughter Program", which is a community and university cooperative effort to motivate Hispanic women to become interested in higher education. Hispanic faculty and students are involved in the program as volunteers. The Assistant Deans for Cultural Affairs at UA, mentioned previously, function as community liaisons, in addition to their other duties on campus.

The universities demonstrate concern for the welfare of minority communities by encouraging university participation in community activities. There is always room for improvement in this important

area of concern, though. Closer working relationships with minority community advocates is highly recommended. Community advocates and the universities have the same basic goals for young people, so they should be working together to meet those goals.

Graduate and Professional Colleges

The questions and responses in this section address some aspects of the retention environment from the perspective of graduate and professional students. Graduate and professional colleges are situated within a university's general retention environment, so most of the discussion of the impacts of retention policies, procedures, and programs also applies to graduate and professional students. Yet, graduate and professional students "have different daily life cycles and different patterns of needs", in the words of ASU's Graduate Dean.

The Framework questions for this section cover three domains: equality of treatment and nondiscrimination; academic support before and after admission; and the availability and adequacy of student services.

Questions about student academic support before admission were answered by student services personnel; questions about academic support after admission were answered by persons in the Graduate and Professional colleges.

The first set of responses reviewed are about post-graduate students in general and graduate students in particular. A brief consideration of professional colleges follows.

The institutional policies concerning assurance of equal treatment and nondiscrimination are said to be clear by the respondents from each university's graduate college. At ASU,

> "According the Graduate College Survey several units believed that while the letter of the law was adhered to, the spirit was not. Problems still exist for minority students in the classroom where they experience ethnically offensive remarks and where they are received as the burden and the problem. Yet in other areas where more minority students are enrolled, the faculty had learned to better handle the cultural differences."

Adherence to the letter and not the spirit of "the law" in regard to minority affairs is a more general issue than at ASU or graduate and professional colleges, based on interviews that I conducted on the university campuses.

There are two questions about academic support, or developmental (the questionnaire uses "remedial"), programs. The first asks about programs designed to help undergraduates who do not qualify for admission to graduate or professional schools because of inadmissible performance on tests or insufficient grade point averages, and whether or not the programs have any influence on later attendance. This question was directed to student affairs administrators. At ASU the respondent recommended that the question be redirected, but one of the persons to whom the question was redirected did not respond. The other "redirectee" responded to a similar, second question. The question stimulated a general but pertinent response from the UA administrator, the essence of which is: "This is an area

that needs better attention and relates to thoughts about offering more help to those that fail." The Learning Assistance Center at NAU offers workshops for undergraduates "who fail to qualify due to test scores on standardized entrance exams, or who are seeking preparatory tutorial help prior to completing the test."

Some of the tests covered by workshops at NAU are the PPST (Pre-Professional Skills Test), GRE, LSAT, and GMAT. The UA also conducts "mini-workshops" on the PPST.

The second question asks graduate school personnel about the role of "remediation techniques" in graduate and professional training at their institution, and what effects such programs would have on retention of minority students.

The Graduate Dean at ASU reminds us that: "Terminology such as 'remediation techniques' is not particularly apropos of the situation that exists at the level of graduate study." There are many reasons why graduate colleges need to expand and improve the skills of graduate students, he goes on to say. Some of the reasons are refreshing old knowledge, entering a graduate field different from a student's undergraduate major, and lack of exposure to intensive written communication requirements. ASU has planned workshops to meet the special needs of minority students, and academic units may nominate first year students for the Graduate College's mentor program.

The mentor program matches the student with a graduate student mentor under the supervision of an academic advisor. Some minority student retention problems that were mentioned in ASU's "Graduate Survey" are: there are small numbers of minority students in some programs, making it difficult to form "informal support groups"; minority students may take a longer time to graduate because of language difficulties; and minority students may lack the political sophistication needed to make use of the "informal flow of information." At the University of Arizona, there are many programs for undergraduates; it is said that in graduate school there is more individual attention in tutoring and mentoring.

"Remediation programs specifically for graduate students are not available at the University of Arizona at this time." "Remediation is not a major problem at the graduate level," at NAU. NAU's graduate programs are small and the graduate office works with departments to help remove deficiencies or to deal with academic problems. The graduate office notifies departments and advisors if a graduate student gets less than a B in a course, for example.

The response to the question about how well the regular student services are "attuned to the needs of graduate and professional students" and how fully minority students use these services from NAU is:

> "Student services are rarely aware of special problems of graduate students. The focus of most all student services is on the problems of the traditional 18-22 year old student. This problem is probably most serious with regard to financial aid."

The graduate college at UA "intends to survey student services for graduate students in the future." At ASU, many services are more "attuned to the undergraduate rather than the graduate student." The reasons cited for this

difference are the large volume of undergraduates that need to be served, and the lack of awareness, in some areas, of the different patterns and needs of graduate students. "For minority students, the fact that the campus services appear designed to serve the needs of a different clientele compounds many of the problems facing all graduate students on campus."

The last question asks if special student services should be available to graduate and professional students, and how minority students could be most effectively given needed support. The planned survey at the UA will help answer the question for that institution.

The UA respondent suggests that special training for student services personnel and recruiting staff from minority populations could help provide needed support. Current services are needed, according to the ASU respondent. ASU's Graduate Survey respondents offered two suggestions: the first is to develop ways to address known minority graduate and professional student needs; the second proposes a needs assessment survey.

There is also the recommendation that minority services be integrated and that service areas hire minority staff to serve both minority and majority students.

"This has the important effect of sensitizing the entire support staff and does not segregate minority employees or the services they provide." NAU suggests that one person in each service area could be designated as the contact person and advocate for graduate students.

The College of Law at ASU has had a first year tutorial program since 1984, where students who are identified by low scores on the LSAT or low grade point averages work with upper class tutors during the fall and spring semesters. There are also minority student organizations; last year they sponsored a LSAT prep course designed for minority students. ASU's College of Law also participates in the Graduate College's Mentor Program. The respondent offered the same general observations about the role of student services in meeting law student needs as the graduate officer. Three additional suggestions are: student services needs to recognize that law students may not receive adequate information because they do not typically frequent the same areas of campus as undergraduates; some consideration should be given to establishing a Graduate Minority Student Affairs office; and some minority students might benefit from flexibility in the amount of time required to finish their degree.

At the University of Arizona, "The College of Law has been developing a strong support and retention program to assist minority students once they have been enrolled." The Minority Law Student Association at UA offers: group support; academic advice and book scholarships; tutorials for first year and selected second and third year classes in cooperation with the Law College; intensive writing workshops; and workshops on writing, note-taking, and outlining. The Colleges of Medicine and Pharmacy at UA both act affirmatively for students and offer support for students who are having difficulty with their curricula.

Observations

Graduate and professional students have different patterns of needs than

undergraduates. Admissions selectivity and greater individual attention by faculty do not obviate the need for support services for graduate and professional students, once they are enrolled. Most of the programs reviewed above address academic needs, for example, through tutoring, mentoring, and workshops.

Financial counseling and aid, student employment, guidance, placement, housing services, and grievance procedures are services offered by student affairs, as we have seen, and there is some concern that these services may not be as well attuned to graduate and professional students' special needs as they could be. This is almost the reverse of the problem identified for undergraduate students: there are numerous support services offered through student affairs for undergraduates, but there is less involvement of academic affairs in student development outside of the classroom. Respondents offered several helpful suggestions for improving student services for graduate and professional students, ranging from conducting needs assessments and training to establishing a special office. Both minority and majority student retention might be improved by implementing some of their suggestions.

With the possible exception of NAU and the Colleges of Law, there does not appear to be much effort designed to help undergraduate students prepare for entrance examinations for graduate and professional schools, or to counsel them and improve their skills if they fail. A respondent from the University of Arizona offers an opinion, from the perspective of student affairs, why this might be the case at his institution:

> "I suspect most colleges have not developed specific advice or structure for students whom they disqualify or put on probation. Part of this comes from the fact that many faculty and academic administrators do not see the need for developmental work on this campus and are not encouraged to see or work with that need. Student Affairs will never be able to meet this need alone, in my estimation."

The developers of policies and programs designed to increase sensitivity to cultural differences should not forget to include graduate and professional schools in their planning.

Conclusions

The outcomes data on minority student retention to graduation in Arizona's universities are cause for concern. Except for Asians, minority student retention rates are much lower than for whites. Minority student graduation trends over the past five years also show some lack of progress in achieving the goal of retention. Strong patterns in the retention data suggest possible leverage points for retention programs; the strongest is an early pattern of departure. There are new programs underway that promise to take advantage of these leverage points, and to increase retention rates in the future.

Retention of minority students to graduation is a complex problem that requires a high degree of commitment, creativity, energy, and coordination for successful solutions. A first step in designing successful solutions is the recognition that there is a university retention environment that may be good, bad, or indifferent from the perspective

of retention. An ideal retention environment is composed of several key components linked together to achieve the same goal. The key components are: early intervention; financial aid; intellectual integration; social and cultural integration; advising; career counseling and placement; monitoring and evaluation; and community service programs. The linkages are among students, faculty, staff, administrators, and the service community.

The critical look at the retention environments in Arizona's universities in this section reveals some strong components, some weak components, and some indifferent components. Most of the strong components -- the programs, policies, and procedures that have, or potentially have, a positive effect on retention -- are recent developments.

The biggest weaknesses in current retention environments are sparse linkages, spotty involvement of the faculty, limited university-wide coordination of retention efforts, and insufficient monitoring and evaluation of retention policies, programs, and procedures.

ROLE MODELS

Introduction

There is a strong conviction -- widely shared by university students, faculty, staff, and administrators, and especially by members of minority communities -- that minority faculty, professional staff, and administrators are a vital presence on campus that demonstrates institutional commitment to the goals of minority education. Minority personnel in positions of authority and responsibility serve as significant role models for students, and their empathetic advice and mentoring help students persist. They are also well-situated to bring their special knowledge and experience to bear upon the development and evaluation of policies, procedures, and programs that affect minority student access and persistence.

Minority faculty, professional staff, and administrators who serve as role models and university resources are often overworked, because there are usually so few of them on campus. The time spent with students and on committees and task forces has to be balanced with professional needs and obligations. If the demands upon their time in their roles of mentor and expert are too great, and they have to neglect the professional obligations that are the core of their performance evaluations, minority personnel may not be promoted, awarded merit, or granted tenure.

At a minimum, each university should have numbers of minority faculty, professional staff, and administrators that match the percentages of students in each ethnic group on campus, and considerable attention should be given to their retention and to the development of their professional careers.

Outcomes

Each university is an Equal Opportunity Employer and each has an Affirmative Action plan and an Affirmative Action office. But adherence to the "letter of the law" does not, necessarily, imply adherence to the "spirit of the law" by everyone concerned, as we have seen in another context. Furthermore, universities nationwide have not graduated enough minority professionals, so the competition for minority personnel is keen. For

whatever reasons, minority faculty, professional staff, and administrators are underrepresented in Arizona's universities, by the minimal criterion mentioned above. Earnest efforts to recruit and retain minority personnel by Arizona's universities have resulted in gains in the past few years, and the trajectory looks promising for the future (See Cotera 1987).

Minority Administrators, Faculty and Professional Staff

Table 12 presents the minority percentages of total administrators, faculty, and professional staff compared with percent minority headcount enrollment for each university for the fall semester, 1987. At ASU the overall percentage of minority personnel in each of the three categories exceeds the overall percentage of minority student enrollment. Minority faculty, professional staff, and administrators at NAU and UA are underrepresented by these standards. However, the data tabulated by ethnicity for each university reveal some important patterns of representation that are masked by the aggregate data.

Most of ASU's minority administrators are Hispanics and Blacks, and over half of the minority faculty are Asians. The distribution by ethnicity for minority professional staff is more even, except for the small percentage of Blacks. At NAU most minority administrators and faculty are Hispanics; Hispanics and Blacks are nearly tied among minority professional staff. Most minority administrators at UA are also Hispanics. Most minority faculty at UA are Asians, closely followed by Hispanics; the reverse is true for professional staff.

Hispanics are underrepresented, in comparison with Hispanic student enrollment, in all categories at all institutions, except for administrators at ASU. The strongest representation of Hispanics is among administrators; the weakest is among faculties.

American Indians are very strongly represented among professional staff at ASU, and they are moderately well represented among professional staff at UA and among administrators at ASU.

American Indians are underrepresented in all categories at NAU, but the percentage of American Indian students enrolled is greater by far than in either ASU or UA, and with the exception of professional staff, NAU has the best percentage representation. Underrepresentation of American Indians at UA and ASU is not great, but the percentages of students are also small.

Blacks are strongly represented among administrators at ASU and NAU, and among professional staff at NAU. Blacks are underrepresented in all other categories, but the differences are not great, except among professional staff at ASU.

Asians as a group have the best representation in Arizona's universities. The only underrepresentation is among administrators at ASU and UA, and among professional staff at UA, although the latter difference is practically negligible. The strongest representation of Asians is among faculty at ASU.

Minority Faculty
Tenure Status

The status of "tenured faculty" may be seen as a measure of the intent to retain faculty who have demonstrated their

competencies in the judgement of their peers. Faculty may be hired with tenure status, or they may be awarded tenure after a probationary period. Faculty "on track" may expect to be evaluated for tenure, while faculty "not on track" may not.

Table 13 arrays the tenure status of minority faculty by university and ethnicity. A first comparison may be drawn between the total minority faculty column ("Min.") and the column listing the tenure status of all faculty ("Employ."). NAU and ASU have larger overall percentages of tenured faculty than UA, by about 10 percent. The percentage of tenured minority faculty equals the overall percentage of tenured faculty at UA, while at ASU and NAU there are marked discrepancies, of nearly 20 to over 40 percent.

The percentages of minority faculty who are on track are greater than those not on track in all three institutions and the percentages are relatively large, which signals the intent to consider a number of minority faculty for tenure in the future.

The patterns of tenured faculty status by ethnicity basically mirror those of the aggregate. The percentage of tenured Asian faculty at UA is unusually large, larger in fact than the overall percentage at UA. In some instances, the percentages of minority faculty who are on track are not always greater than the percentages who are not on track for some ethnic groups, which may make a reasonable approximation of equity for those groups more difficult to achieve. The total numbers of some groups are also very small, which echoes, perhaps more dramatically, some of the data discussed in the preceding section.

Faculty and Staff Hiring, Evaluation and Retention

"Framework" questions on faculty and staff hiring, evaluation, and retention may be grouped into two main categories that parallel similar questions about students: access and retention. The access questions cover issues of representation, identification, recruitment, and hiring procedures, and the nature of the relationships among the Affirmative Action Office, departments, and administrators. Retention questions address upward mobility, and acceptance and participation of minority personnel. Affirmative Action Officers from Arizona State University and the University of Arizona responded to the questions. There is no response from Northern Arizona University.

The first access question asks how minority representation among faculty, administrators, and support staff compare with minority representation in the student body, and if this representation is "consonant with the needs of minority students."

The UA respondent believes that the representation compares "similarly", but she thinks that "...an increase in minority faculty representation would perhaps better affect the adaptability and interests of minority students in the curriculum." Also, more minority faculty would help raise the awareness of majority faculty of presentations that reflect minority experiences. At ASU, the representation compares "unfavorably", and it is said not to be in consonance with minority student needs. "While a comparison of the percentages appears to be good, the ratio of the number of students to the number of faculty, four faculty to every one hundred students, is not as good as it could be."

Current institutional procedures for identifying, recruiting, and hiring minority faculty and administrators, the subject of the second access question, "need improvement" at UA and are "not as effective as I would like them to be" at ASU. Some departments at UA with strong commitments to diversifying their faculties have had some successes. "For other departments who are not actively diversifying, they should not be permitted to hire until they hire minorities except under exceptional circumstances." Lack of effectiveness at ASU is said to be because of federal laws and regulations: for example, it is not possible to require candidates for employment to identify their ethnicity, so some minority candidates may be overlooked. The ASU respondent believes that the procedures can be improved. ASU is currently "reviewing and revising policy that will provide maximum flexibility within the law to hire minorities."

Affirmative Action Officers at UA and ASU have ready access to all supervisory personnel, including department heads, and their recommendations on cases involving bias in recruitment and hiring carry "a great deal of authority" or are responded to "supportively." All hiring at ASU and UA concerns Equal Opportunity. Advice from the Affirmative Action Officer on Equal Opportunity hiring is "sought and weighed heavily" at UA, and the Affirmative Action Officer at ASU is "a major and regarded contributor" to hiring decisions.

The last access question asks if each department has assigned an affirmative action liaison with the central administration, and about the usefulness of this technique for maintaining communication on matters of policy and procedures. At ASU, the practice of assigning an affirmative action liaison "varies from department to department."

The ASU respondent thinks that the usefulness of the technique depends directly upon the liaison's authority. The University of Arizona is "in the process of establishing individualized departmental Affirmative Action Plans and identifying by college a full professor liaison to the office." The process will be in place during the Fall semester, 1988, and it is hoped that it will increase commitment to affirmative goals at the department level.

Retention questions in the Framework questionnaire deal with issues of evaluation and workloads, upward mobility, acceptance, and participation.

Special duties in guidance and leadership are frequently required of minority faculty, in addition to their regular duties. How much recognition of these special assignments is given in evaluating minority faculty for promotion and in assigning workloads are subjects covered in one of the questions. At UA, additional duties are weighed no differently than for majority faculty. The "impression" of ASU's respondent is there is a "range of some recognition to no recognition." Each department at ASU, and elsewhere in the university system, has considerable latitude in developing criteria for promotion and workloads, within general university guidelines. For upward mobility, ASU provides development and training programs and year-long internships, with particular emphasis on the minority population. The Provost's Office at UA provides workshops for minority faculty on promotion and tenure.

Participation by minority faculty, administrators, and professional staff in

campus committees and other forms of appointed or elected governance can demonstrate acceptance of minority personnel as integral members of the university. At UA: "Minority faculty and administrators are most likely to be overextended through committee work. The demand for their representation outweighs the supply." The institutional leadership at UA has been advised of this problem by the Affirmative Action Officer and minority faculty. Whether or not minority personnel participate adequately at ASU is said to be a matter of opinion. Some minority groups feel that they should be represented on every committee, while others feel they serve on too many committees. At ASU, the demand also exceeds the supply: "Those who form committees find that attempting to place equal representation on a three or four person committee is impossible." In response to the question, "What positive roles do the institutional leaders play in fostering acceptance of minority personnel," UA reports that the Provost visibly includes minority staff as a "model of positive interaction." The institutional leadership at ASU fosters acceptance through informal and formal personal contact; the amount of participation depends upon individual leadership style.

Conclusions

Strong representation of minority faculty, administrators, and professional staff is important for several reasons. Minority personnel are needed as role models for students and colleagues, and their expertise and experience is invaluable. Diversity among university personnel also enriches the experience of everyone on campus.

There have been gains in hiring and promoting minority personnel in Arizona's universities in the past few years, but minorities are still underrepresented among faculty, administrators, and professional staff. There are some striking patterns of underrepresentation by ethnicity that need attention, especially among faculty. The patterns of representation do not always reflect the demographics of the state, and although some of the percentages look good for some groups, the numbers of persons are quite small in several instances. The identification, recruitment, and hiring of minority faculty, administrators, and professional staff could be improved, especially in departments that are not "actively diversifying." Some assistance may be found in the article, "Recruiting Minority Professors: Some Techniques That Work", in The Chronicle of Higher Education, February 10, 1988 (Heller 1988). The access and influence of the Affirmative Action officers appear to be good, but stronger links with departments, especially academic departments, would be beneficial.

There are differences in the percentages of tenured minority faculty compared with the percentages of all faculty that should be addressed, and in some cases the relative frequencies of faculty on tenure track and faculty not on tenure track are slightly out of balance. Policy that recognizes the extra contributions of minority personnel in guidance and leadership, and enhancement of professional development workshops, mentoring, and internships would help in both retention and promotion.

CONCLUSIONS

Demographic projections of Arizona's population indicate a dramatic increase in the percentages of two major ethnic minority groups -- Hispanics and

American Indians -- within the next decade. The existing patterns of education show that there are major deflections of Hispanics, American Indians, and Blacks from the educational stream, particularly at the transitions or junctures between educational levels, and in the percentages of minority graduates from universities in the state.

Arizona, with its unique blend of minority cultures, has an unparalleled opportunity to demonstrate its ability to develop and implement model programs of minority education. Although successful efforts are underway at all educational levels, meaningful progress requires a comprehensive, integrated, and unified plan for minority education.

In 1983, the three university presidents appointed "The Arizona Universities' Study Group on Minority Student Recruitment and Retention" at the request of the Arizona Board of Regents. The Study Group identified major issues affecting minority student recruitment and retention, and recommended 19 actions to improve minority education in the state. The university presidents responded to the study, and the Arizona Board of Regents subsequently passed a resolution in October, 1984, that incorporated the intent of the Study Group recommendations.

The fundamental issues have not changed, however. The universities have expanded their minority student recruitment and retention programs, especially in the last two to three years, and some of the programs that have been evaluated are successful, but the overall outcomes are still unacceptable.

The issues of minority education in Arizona, and the appropriate responses to these issues are clearly understood. The universities must act upon this understanding and be held accountable for the outcomes. Fragmented efforts, regardless of quantity, will not suffice; the universities must assign the highest priority to minority education and effectively coordinate their energies in meeting well-defined goals and objectives.

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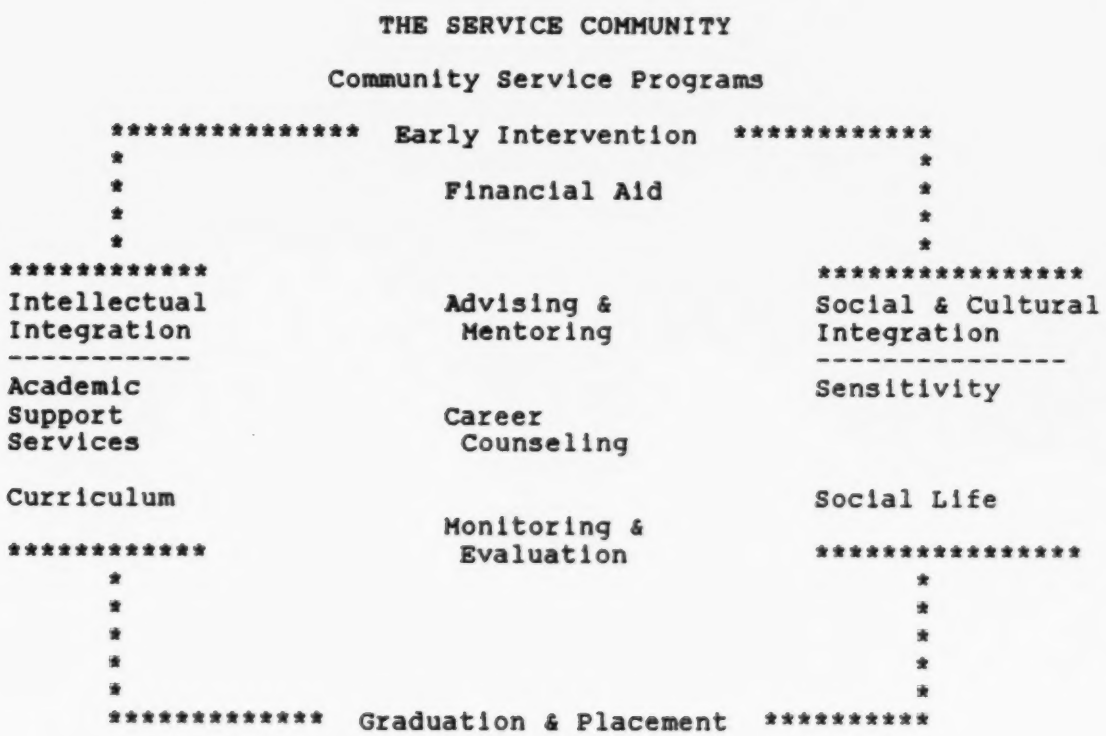
Figure 3. The University Retention Environment



APPENDIX A

FRAMEWORK QUESTIONNAIRE

TASK FORCE ON EXCELLENCE, EFFICIENCY AND COMPETITIVENESS

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Robert MacVicar
Executive Director

January 22, 1988

Dear Colleague:

As you know, the Arizona Board of Regents has appointed a Task Force on Excellence, Efficiency, and Competitiveness to review and make recommendations concerning the operations of the three Arizona universities. Minority student access to and persistence in higher education is among the seven major issues identified for study.

We are especially interested in current access and persistence efforts, and the institutional commitment to minorities. Over ten years ago, a planning group of the American Council on Education developed a "Framework for Evaluating Institutional Commitment to Minorities: a Guide to Institutional Self-Study". We have chosen to use a modification of this instrument to help in our assessment.

The questions are designed to stimulate thoughtful responses in each of eight institutional sectors: Admissions; Financial Aid; Counseling, Educational Support, Advising, and Placement; Academic Affairs; Student Affairs; Graduate and Professional Schools; Affirmative Action; and Central Administration. The questions for each sector are different, but all are designed to be more descriptive than prescriptive. We envision a report that presents and discusses the responses for each university separately, and in the aggregate, along with summaries and interpretations of interviews with minority faculty and students.

Please respond to each question in your area of responsibility with a few thoughtful and comprehensive paragraphs. We would be happy to receive any supporting documentation you care to include, and any additional thoughts, concerns, and suggestions. Each university is organized a little differently, especially in the areas of counseling, educational support services, and placement, so someone else may be in a better position to respond to certain questions. Please indicate who responded to each question, along with their title, to help us better understand the division of responsibilities within your institution.

Based on my schedule of visits to each campus, and allowing for about the two work weeks, we would like to have your responses by the following dates:

Northern Arizona University - February 12, 1988
Arizona State University - February 19, 1988
University of Arizona - March 4, 1988

Please send your responses to me at the Task Force Office address.

Thank you very much for your assistance in this extremely important endeavor. If you have any questions, please call.

Sincerely,

John J. Wood

John J. Wood
Task Force Staff Member

I. Undergraduate Admissions and Recruitment

A. Does the institution have a means of identifying minority persons interested in training offered by the institution? Is the method effective?

B. What is the nature of the relationships between institutional student recruitment personnel and counselors at secondary schools having large minority student enrollments?

C. Are these institutional means for facilitating the recruitment of minorities for disciplines in which they are under represented? Do these strategies include making special funds for recruitment, financial aid, and retention techniques available for these efforts? To what extent have the methods changed the distribution of minority students among the various disciplines?

D. Are admissions decisions on minority applicants made by persons who have sufficient experience and contact with minority student candidates to understand the special characteristics of their backgrounds, needs, and interests?

E. Are all applicants for admission judged by flexible criteria? How flexible are the criteria? Can admissions staff give less weight to test scores for students whose secondary school records and other data show promise?

F. Are information and materials made available to applicants which present an accurate picture of program requirements and campus life? What is the impact of the materials on student decisions to attend? Are minority students, faculty, and administrators consulted in an attempt to assess whether the overall image transmitted reflects the experience of minority students at the institution?

G. How does the proportion of minorities in the student body relate to the proportion of minorities in the geographical region(s) from which the institution mainly draws its students?

H. How does the proportion of minority students admitted under standard admissions criteria compare with the proportion of academically high risk minority students admitted? How closely are these proportions related to the institution's programs, purposes, and goals in student academic support?

I. In your area of responsibility, what are the barriers to minority student access and persistence? What can be done to remove or positively alter these barriers? Do you or your staff have a strategic plan for removing or positively altering the barriers to minority access and persistence?

II. Financial Aid

A. What priority is given in the use of institutional (non federal) student financial aid funds to supplementing student assistance from federal sources and providing full support for needy students?

B. What emphasis is given to ensuring that campus work assignments directly complement the student's educational program and career interests? Is this aspect of the financial aid package routinely evaluated for its effects on minority students? What changes in work assignment procedures have resulted from such evaluations?

C. Is it institutional policy to remind students that they must, and when they must, apply for financial aid? Is the reminder effective in obtaining on time applications from minority students? Is it necessary to keep funds in reserve for late applicants?

D. Are special packages (combinations of programs) of student financial aid offered to educationally disadvantaged and minority students? What means are used to determine the adequacy of the aid package in relation to the student's real needs?

E. Has a routine institutional procedure been devised to allow increases in an individual's financial aid package, should the need arise during the school session? Are discretionary funds available for emergency loans?

F. Are special technical assistance and counseling in budgeting matters given, as a matter of policy, to financially disadvantaged and minority students? How effective is this guidance in increasing the size and number of individual financial aid awards?

G. In your area of responsibility, what are the barriers to minority student access and persistence? What can be done to remove or positively alter these barriers? Do you or your staff have a strategic plan for removing or positively altering the barriers to minority access and persistence?

III. Counseling, Support Services, Placement, Advising

A. Is there an institutional effort to cooperate with secondary school administrators and counselors in increasing the scope and effectiveness of professional guidance? In this context, how are the particular guidance needs of minority students from various cultural backgrounds addressed? Are personnel at schools having substantial numbers of minority students involved in the process?

B. How much emphasis is placed on intensive early freshman orientation and preregistration counseling for minorities? Are these programs important factors in retention of minority students? Is peer counseling used in the programs, and how useful is it?

C. How important a role does career counseling (including guidance on graduate education) play in the design of institutional student support mechanisms? Do minority students use these support mechanisms advantageously?

D. Is there an institution wide attempt to ensure that the academic advisors assigned to minorities are sensitive to the emotional and academic needs and the cultural backgrounds of the minority student, especially during the first year of involvement with the institution? How is the effectiveness of the assignments monitored?

E. Are the study skills remediation and tutorial services provided by the institution commensurate with demand and need? Are all educationally disadvantaged students encouraged to attend these special programs? How, and how early, are students who need these services identified?

F. Do stigmas attach to students who participate in remediation programs? Is there an institutional effort to address this problem?

G. Are there support service courses (remedial, learning skills courses) for which academic credit should be awarded?

H. Are support programs that provide services to minority students staffed by regular faculty or by persons outside the regular tenure track? How is the competency of the staff judged, and how are high performance levels rewarded?

I. Do the directors of support service programs participate in administrative decisions that affect the students served by the programs? How influential is the advice of the directors? How are student insights obtained to inform these decisions?

III. Counseling, Support Services, Placement, Advising (Cont.)

J. What methods are used at the institution to measure students' academic progress and assess the effectiveness of support service courses? Does the institution administer academic competency programs or tests? How much is known about the academic progress of minority students at the institution? Are special academic support services provided for students for whom English is a second language?

K. Are remedial programs provided for undergraduates who fail to qualify by testing, or whose grade point averages are insufficient for admission to graduate or professional school? What influences do the programs have on later attendance at graduate and professional schools by minority undergraduates?

L. What aid is given to students in finding summer employment? What stress is placed on fitting summer employment experiences to the student's academic interest? Do minority students use the summer placement programs fully?

M. How is the institution's placement office monitored to ensure that minority students are treated with fairness, both in temporary student employment and in contacts with recruiters from business, government and industry? How are minority students encouraged to use the placement system? Are placement records of minority students maintained?

N. Can and should career counseling, academic advising, and placement functions be better coordinated throughout the institution? How has this matter been addressed by the personnel directly involved and by the responsible administrators?

O. In your area of responsibility, what are the barriers to minority student access and persistence? What can be done to remove or positively alter these barriers? Do you or your staff have a strategic plan for removing or positively altering the barriers to minority access and persistence?

IV. Curriculum

A. How is the regular curriculum assessed for adequacy in study and analysis of works by minority authors and works focusing on minority concerns and experience? Are adequate means available for introducing more works of these kinds into the curriculum?

B. Do the institution's libraries and bookstores regularly carry publications by minority authors and publications devoted to minority issues? How is the completeness of inventories in this area verified?

C. How are changes in curriculum and teaching methods assessed to determine their influences on the education of minority students? Are the educational needs and interests of minority students used as the basis for revisions in curriculum and teaching methods? By what means are these needs and interests explored?

D. Is there an institutional mechanism for assessing the amount of undergraduate and graduate research being conducted on minority concerns? How can research of this type be encouraged?

E. How closely related are the subject matter and teaching methods of the regular curriculum to the subject matter and teaching methods of support service courses?

F. How successful are teaching techniques in support service courses introduced into the regular curriculum? How are faculty members encouraged to develop skill in using effective techniques?

G. How accepted, stable, and integral are ethnic and cultural studies at the institution? Are ethnic studies offerings properly publicized?

H. In your area of responsibility, what are the barriers to minority student access and persistence? What can be done to remove or positively alter these barriers? Do you or your staff have a strategic plan for removing or positively altering the barriers to minority access and persistence?

V. Environment

A. Are studies conducted on the causes of undergraduate and graduate attrition of minority students? Are the factors that influence minority student attrition fundamentally the same as or different from those affecting the majority?

B. How much emphasis has been placed on developing institution wide procedures to improve minority student persistence? What are the roles of administrative staff and department heads in this process?

C. Are minority students eligible for all scholastic honors awarded at the institution? How does the proportion of scholastic honors awarded to minorities compare with the proportion of minorities in the student body?

D. Are institutional programs conducted with department heads and faculty to reduce racially prejudiced attitudes and to increase interest in minority students and faculty? What are standard institutional responses when instances of prejudice have been detected?

E. Are there adequate and responsive complaint/grievance procedures available to all students? Do minority students use the procedures fully? Are channels available for discussing "minor problems (negative faculty attitudes, problematic dormitory relationships, etc.) before they become factors in student decisions to withdraw? Do "major" problems (especially forms of unfair treatment) receive a full and prompt hearing and resolution?

F. How are campus organizations monitored to determine whether they are congenial to minority students and whether minorities are encouraged to participate?

G. Is there a general institutional process by which the social customs and accepted rules of conduct on campus are reviewed for their receptiveness and congeniality to minorities?

H. How much participation is there by minority students in extracurricular activities such as music and drama clubs, social clubs, debating and service groups, newspaper and yearbook staffs, and intramural sports? What efforts are being made to increase minority participation?

I. What institutional procedures ensure that student entertainment and activity programs include appropriate amounts of literature, art, music, and lectures that feature minority artists and intellectuals, and which reflect the interests of minority students?

January 22, 1988

EEC Task Force

V. Environment (Cont.)

J. Is it institutional policy to demonstrate concern for the welfare of minority communities in the region through operation of various community service programs? How are minority students and faculty involved in these programs?

K. In your area of responsibility, what are the barriers to minority student access and persistence? What can be done to remove or positively alter these barriers? Do you or your staff have a strategic plan for removing or positively altering the barriers to minority access and persistence?

VI. Graduate and Professional Programs

A. How successful are the procedures that are used to identify minority students interested in graduate or professional training offered by the institution? Should identification methods be coordinated throughout the institution?

B. Is there agreement between the graduate school and the departments on the minimum qualifications acceptable for students recruited for graduate programs? How flexible are the criteria used to judge candidates for admission? How much restriction do existing admissions criteria place on obtaining an acceptable enrollment of minority students?

C. How much emphasis is placed on building minority student attendance in departments in which minorities are under-represented? Are special recruitment and financial aid funds available for this purpose?

D. Are institutional policies clear on whether minorities will be assured equal treatment and nondiscrimination or be accorded compensatory or affirmative action?

E. How large a role should remediation techniques play in graduate or professional training at the institution? What effect would remedial programs have on retention of minority students?

F. How adequately are the regular student services attuned to the needs of graduate and professional students? Do minority graduate and professional students use these services fully?

G. Should special student services be available to graduate and professional students? How can minority graduate and professional students be most effectively given the support which they need in such areas as, financial counseling and aid, student employment, guidance, placement housing services, and grievance procedures?

H. In your area of responsibility, what are the barriers to minority student access and persistence? What can be done to remove or positively alter these barriers? Do you or your staff have a strategic plan for removing or positively altering the barriers to minority access and persistence?

VII. Faculty and Staff Hiring, Evaluation, and Retention

A. How does the minority representation in faculty, administration, and support staff compare with the minority representation in the student body? Is the extent of minority representation in faculty, administration, and staff consonant with the needs of minority students?

B. How effective are current institutional procedures for identifying, recruiting, and hiring minority faculty and administrators? Can these procedures be improved?

C. Do affirmative action officers have ready access to all supervisory personnel, including department heads? How much authority is carried by officers recommendations on cases involving bias in recruitment and hiring of faculty, administration, and support staff?

D. How much input is sought from affirmative action officers when administrative decisions are made on hiring policies that do not concern equal opportunity? How much influence does the advice of officers contribute to these decisions?

E. Is a person in each department responsible for departmental affirmative action liaison with the central administration? How useful is this technique for maintaining communication on matters of policy and procedures?

F. What authority do affirmative action officers have to intervene in possible cases of bias in admissions procedures, and in recruitment and hiring procedures for students?

G. In evaluating faculty members for promotion, how much recognition is given to special duties in guidance and leadership that are frequently required of minority faculty and administrators in addition to their regular duties? In setting work loads for minority faculty and administrators how much consideration is given to these extra commitments? Are professional development and training programs provided by the institution to aid the upward mobility of minority faculty, administrators, and staff?

H. Are minority faculty and administrators encouraged to understand that they are accepted as integral parts of the institutional community through adequate participation in campus committees and other forms of appointed or elected governance? How aware is the institution leadership of the perceptions of minority faculty regarding the congeniality, respect, and need of the other institutional personnel for their professional services? What positive roles do the institutional leaders play in fostering acceptance of minority personnel?

VII. Faculty and Staff Hiring, Evaluation, and Retention (Cont.)

I. In your area of responsibility, what are the barriers to minority student access and persistence? What can be done to remove or positively alter these barriers? Do you or your staff have a strategic plan for removing or positively altering the barriers to minority access and persistence?

VIII. Administrative Policies

A. What is the balance between "soft money" and "hard money" in the overall funding of programs that are influential in attaining equal opportunity objectives? Is this a desirable long term balance?

B. How much priority is given to operating budget items for programs and staff to meet equal opportunity goals at the central administration and department levels? In this context, to what degree is consideration given to support services, including required increases in faculty contact time with students?

C. Where are student support services placed in the institutional governance structure, and what factors determine their placement? Are the services that focus on minority student access and persistence placed in the most stable and influential sector of the governance structure?

D. How much information is routinely collected on minority students concerning the applicant pool, admission rates, major fields of study, transfer among disciplines, and persistence and graduation rates? Are the amount and kinds of information collected commensurate with the needs for policy decisions?

E. To what extent are attempts made in the conduct and analysis of institutional research and in data collections on students and staff, to examine minority concerns through use of appropriate categories and issues? How is minority advice on these concerns solicited? Are the distinctive concerns of various minority groups handled in ways that are appropriate to their differences?

How are institutional data on minority students and staff distributed among staff and partners, particularly whenever policy decisions that affect the status of minorities are being made? Do the appropriate data regularly receive the widest distribution necessary?

G. What is the nature of interchange between institutional personnel and representatives of the minority communities served and affected by the institution? What mechanisms exist for obtaining advice from members of the minority community about programs that directly or indirectly interact with the community?

VIII. Administrative Policies (Cont.)

H. How many minorities in the administration have high level positions and regular line responsibilities? How strong are their influences on administrative policy decisions that affect the welfare of minority students, faculty, and staff? Do the upper echelon minority administrators have ready access to the institutional head and a proper access to the board of trustees?

I. How clear an understanding to the institutional leaders - board of trustees, institution head, and upper echelon administrators - have of the problem areas in the institution's response to minorities? Do they feel that they are performing satisfactory jobs in assisting minorities toward equal educational opportunity at the institution?

J. How is the status of minority participation in the entire institution regularly reviewed? How are student and faculty inputs obtained?

K. In your area of responsibility, what are the barriers to minority student access and persistence? What can be done to remove or positively alter these barriers? Do you or your staff have a strategic plan for removing or positively altering the barriers to minority access and persistence?

APPENDIX B

THE MADISON PLAN EXECUTIVE SUMMARY

The Madison Plan Executive Summary

University of Wisconsin–Madison
February 9, 1988

The keys to the University of Wisconsin–Madison's success have been its accessibility and educational excellence. If UW–Madison is to continue its traditions of success, it must embrace those who are gravely underrepresented in our community.

The Madison Plan, the result of much study and many contributions by students, faculty and staff, is the first response to the Final Report of the Steering Committee on Minority Affairs presented December 1, 1987. But it also is a broad response to critical and daunting national issues.

The Madison Plan was conceived to address the University's need for diversity in a timely and comprehensive fashion. It proposes changes and improvements designed to make significant progress in attracting and retaining minority students, faculty and staff. It details changes that enhance ethnic diversity in curriculum as a crucial element of educational excellence, and offers a vision that promotes an ethnically diverse, non-discriminatory environment on campus.

The Madison Plan states goals that can be measured and monitored, expanded and adjusted as institutional change takes place. A timetable for implementing the plan's initiatives has been set, and administrators have been assigned responsibility for overseeing each program. Progress reports will be issued at the end of each semester.

The University estimates that implementing the Madison Plan will require approximately $1.6 million for the 1988–89 academic year. The money will come from reallocation of existing resources. During this biennium, the University will not ask for additional state tax money. However, additional state and private support will be needed to sustain the plan's programs. Total public cost will be $4.7 million over 3 years.

Components of the Madison Plan are summarized below.

I. Student Financial Assistance

The Madison Plan provides a package of student financial assistance programs designed to reduce financial barriers to higher education for minority and disadvantaged students. The programs are:

FASTrack (Financial Aid Security Track Program). FASTrack will help low-income Wisconsin students, regardless of ethnic background, pay for college through a combination of grants, work and small loans. Single, financially dependent Wisconsin students will be eligible for the program based on family income and need for assistance to meet college costs. Both work and borrowing will be controlled in order to minimize the student's burden.

FASTrack plans to begin serving 150 new freshmen each year beginning in fall 1988. Within four years, an estimated 600 students will be served by the program, which assures that student financial needs will be met each year for four years, with a possibility of extension.

FASTrack will be funded through institutional loan funds and administered by the Office of Student Financial Aids.

Minority Merit Scholarships. The Madison Plan creates a coordinated program of school, college and university-wide merit scholarships for minority and disadvantaged students. The program, coordinated by the Vice Chancellor for Academic Affairs, will be more understandable and attractive to both students and scholarship donors. The University will seek $4 million in gifts to endow additional minority undergraduate scholarships.

Minority Graduate and Professional School Fellowships and Aid. More fellowships and other aid will be sought through public and private funding with a goal of securing 475 by 1992. The University will:

- Seek to double current state funding for Advanced Opportunity Fellowships with the goal of serving 400 graduate and professional school students.
- Seek a $4 million endowment through the Capital Campaign to fund 25 additional minority graduate and professional school fellowships.

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I. Student Recruitment

The University will rebuild its recruiting program. Its goal will be to increase the number of new undergraduate minority students to 400 by 1993—more than double the number that began study this year.

The University, focusing first on its home state, will:

- Increase its presence in Wisconsin high schools beginning in the 1988–89 recruiting season.
- Improve outreach to Dane County minority students, parents and community leaders.
- Expand recruitment efforts in Milwaukee and other Wisconsin areas with significant populations of minority students.
- Use enrolled University students in minority recruiting efforts, and increase involvement of faculty and staff to personalize the admissions process.
- Increase alumni involvement in recruitment efforts.
- Identify areas in and outside the Midwest for minority student recruiting, using national admission test score search services to target students and schedule meetings with traveling university recruiters or alumni in the targeted student's area.
- Update and improve recruiting materials and information on campus programs and services.

III. Student Retention

Though progress has been made during the past 16 years, UW–Madison's retention of minority students still falls short of its goals. In addition to existing retention programs, the University will develop additional strategies:

- The University will create new Student Orientation programs tailored to the needs of all new students, with particular attention to minorities, transfers, commuters, returning adults, and disabled students. The Office of Admissions will enrich the SOAR program. The Dean of Students Office will add new activities for each Registration Week and fall semester.
- The University will establish a campus-wide program beginning in fall 1988 to track and assist minority freshmen and sophomores. The program will reach out to minority students and foster contacts and continued interaction with faculty and staff who have shown interest in being involved in regular, informal relationships with students. The Dean of Students Office and Vice Chancellor for Academic Affairs will consult with schools and colleges to determine the staffing and structural details of this program.
- The School of Business will establish a Tutorial Program for an initial 120 students interested in being admitted to the school. Minority graduate students will serve as tutors in areas such as statistics, economics and accounting.

IV. Reaching Out

The University will make special effort to strengthen programs to reach out to minority middle and high school youth, and initiate or expand programs for students and faculty at colleges and universities that have substantial minority populations. The University hopes to develop ten such relationships by December 1989 and another ten by the end of 1991.

The University will model such linkages on a relationship with Spelman College in Atlanta, a predominantly Black women's college. Students and faculty will be encouraged to attend UW–Madison summer research programs. The University also will seek to recruit students for its Graduate School, and urge faculty to spend sabbaticals at the University.

In addition, the University will:

- Enlist federal help to develop an Upward Bound program for Madison, cooperating with schools, parents and community groups. Upward Bound is designed to improve high school student retention and graduation rates of economically and academically disadvantaged students. A committee has been appointed to write a proposal for the program, expected to begin by July or fall 1989. An advisory board of parents, students, school officials and community representatives will be appointed for the program.
- Offer summer workshops for teachers whose students participate in the summer College Access Program, a program which acquaints middle and high school students with the University.
- Double the number of minority and disadvantaged students served by the Summer Collegiate Experience Program, an eight-week session that helps prepare admitted students for University study and campus life in the summer of their freshman year.
- Expand the Center for Health Sciences' Summer Enrichment Program, a two-week science and health awareness program previously open only to Madison-area minority middle school students, to include ten Milwaukee-area pupils.

The University is prepared to use its resources to join the Madison Metropolitan School District, its teachers and parents in an effort to improve minority achievement in Madison elementary and secondary schools.

The University also is interested in developing educational partnerships with South Madison school children and parents.

The University Dean of Students Office also will enter a partnership with the Madison Urban League and Chamber of Commerce to study the feasibility of creating a community support program—"Host Family Project"—for new out-of-state minority students.

V. Faculty Recruitment and Retention

The Madison Plan includes efforts to recruit and retain more minority faculty and staff, measures that will be critical to achieving a richer and more diverse educational environment.

The University's goal is to hire 70 minority female and male faculty by the end of 1991. It hopes to hire 25 tenured faculty over the three years and 45 tenure-track faculty at a rate of 15 each year.

To reach these goals, the University will:

- Fill faculty vacancies due to retirement or resignation and new positions created by the 1988–89 budget with qualified minorities whenever possible.
- Work with Deans and departments to ensure minority recruitment receives top priority.
- Seek to draw at least 10 minority faculty as visitors to fill available positions while the hiring process for those positions is underway.
- Renew and develop faculty programs with five institutions by December 1989.
- Publish a handbook containing strategies for expanding the pools of faculty applicants. An April 9 workshop for Deans and department chairs also will address this subject.
- Pledge a supportive environment for nourishing minority faculty careers.

VI. Academic Staff Recruitment and Retention

The Madison Plan recognizes the role of academic staff in instruction, research and in many facets of student life. The University will emphasize the hiring of minorities for staff positions across the spectrum of University operations.

In addition to strengthening and broadening professional development programs, the University will:

- Make available funds to conduct nationwide searches for selected staff positions. The University's goal is to hire or promote 125 minorities to these positions during the next three years.
- Recommend that the Academic Staff Assembly establish a standing permanent committee on affirmative action to develop policy on the recruitment and retention of academic staff. The committee also would be asked to assess existing minority staff morale and recommend improvements.
- Identify 25 classified staff positions for open recruitment that would improve minority staff chances to compete for the positions.
- Review the selection and appointment process for women and minorities to senior administrative positions.

VII. The Curriculum: Ethnic Studies Requirement

The Madison Plan proposes to add an ethnic studies credit requirement for all undergraduate students to help them more easily recognize, understand and appreciate cultural differences throughout the country and world.

- The goal is to institute the requirement by fall 1989. It is recommended that the credit requirement be fulfilled with existing and expanded course offerings.
- The University will designate a coordinator and committee to create a multi-disciplinary course built around the theme of "understanding other cultures," to be offered beginning in spring 1989. Scholars from UW–Madison and elsewhere will help students gain comprehensive understanding of cultural issues and the experiences of minorities.

The report notes this multi-disciplinary lecture format was tried successfully in 1950s social and ethical issues classes.

The Faculty Senate's Committee on the Academic Affairs of Minority and Disadvantaged Students and academic planning councils will be asked to develop a working definition of ethnic studies and procedures for assessing the ethnic content of courses.

In addition, up to 15 grants will be made available in summers 1989, 1990, and 1991 to faculty who wish to design undergraduate ethnic studies courses or develop the material to be presented in them.

Instructors will be urged to review their existing course outlines for opportunities to discuss pluralism, ethnicity, gender, and class.

VIII. Multicultural Center

The University has appointed a committee of faculty, students and staff to make decisions before April 15 on the logistics for creation of a campus multicultural center.

During planning for a center, the University will double the Multicultural Fund allocation to $100,000 a year.

The University requires that any center design meet these conditions:

- It should combine social and academic functions that promote cultural appreciation and knowledge, and foster student, faculty and staff interaction.
- It should create an environment that encourages communication among all campus cultures so it is not perceived as a special service for minority students.
- It should actively involve students, faculty and staff from the entire University community.

IX. Non-Discriminatory Environment

The Madison Plan recognizes that the University must maintain a climate which is not intimidating, hostile or demeaning to anyone.

The Madison Plan contains several initiatives to address student conduct while recognizing students' constitutionally protected freedom of speech:

- The Student Conduct Policy Committee will be asked to advise by April 15 whether to broaden student disciplinary policy to impose special or more severe penalties when violations of existing student conduct rules involve race, color, creed, gender, age, sexual orientation, disability, national origin or ancestry.
- The Dean of Students Office will immediately establish a non-disciplinary mediation and counseling program to deal with conduct alleged to be demeaning or harassing on racial or other grounds.
- The Wisconsin Student Association will be asked to take primary responsibility for the development of substantive written standards of conduct by student organizations and procedures for discipline of those groups.

The plan also contains several initiatives to address harassment of students by employees on the basis of race, color, creed, sexual orientation, gender, age, disability, national origin or ancestry:

- The Faculty Senate and Academic Staff Assemblies will be asked to adopt harassment policies. The University will work to have similar policies enacted prohibiting harassment of students by teaching or project assistants.
- A statement directing employes to refrain from discriminatory or harassing conduct will be distributed to all University employes.
- The Dean of Students Office will be assigned to receive written harassment grievances and act as a liaison between student and the University until the matter is resolved.
- Each college of the University will be asked to develop and advertise a student grievance procedure.

TABLES AND FIGURES

Table 1
Arizona Universities
Primary State Service Areas in 1986* and Percentages of
New Students Who Were Freshmen Arizona Residents in 1984**

Primary Service Areas in 1986			% Freshmen Ariz. Residents 1984
ASU			
Total		2080	
Maricopa	1820	88%	56%
		88%	
UA			
Total		2178	
Pima	1091	50%	
Maricopa	742	34%	69%
		84%	
NAU			
Total		1240	
Maricopa	574	46%	
Coconino	171	14%	
Pima	134	11%	
Navajo	71	8%	78%
		79%	

*Counties of origin of Arizona high school graduates enrolled in Arizona public institutions, that account for at least 75% of the total enrollment. Source: MacVicar (1988).

**Source: Bartram and Gebel 1988

Table 2
Arizona
University Enrollment Compared With Community College Enrollment and Estimated High School Graduates

Ethnicity	Fall 1987 NAU		ASU		UA		Sp.1987 C.College		1986-87 H.S.	
White	11108	85%	36525	89%	23751	76%	98871	76%	21288	72%
Hispanic	794	6%	2101	5%	2198	7%	14584	11%	4946	16%
Am.Indian	742	6%	480	1%	276	1%	4691	4%	1855	6%
Black	174	1%	872	2%	482	2%	2977	3%	1130	4%
Asian	86	1%	1076	3%	828	3%	2341	2%	436	2%
Unknown	20	<1%	—		3730	12%	5557	4%	--	
Totals	12924		41054		31265		130021		29555	
Total Minority	1796	14%	4529	11%	3784	12%	25593	20%	8267	28%

University headcount enrollments exclude international students. The ASU "Other" category is listed as here as "White". Percents are rounded to the nearest whole number.

Sources: ABOR Minority Recruitment & Retention Report, 1987; AzCommunity College Board, Annual Reort, 1986-1987; Bartram and Gebel 1988.

Table 3
Arizona Universities
Minority Enrollment Trends Fall 1983-1987

University/ Ethnicity	Net Change in Headcount	Net Change in % Total Headcount
UA		
Hispanic	+442	+1.0
Am. Indian	+ 28	0.0
Black	+74	+0.1
Asian	+413	+1.1
ASU		
Hispanic	+351	+0.6
Am. Indian	+56	0.0
Black	+50	-0.0
Asian	+256	-0.5
NAU		
Hispanic	+150	+0.3
Am. Indian	+138	+0.3
Black	+ 9	+0.1
Asian	+4	-0.1
COMBINED		
Hispanic	+943	+1.9
Am. Indian	+222	+0.3
Black	+133	0.0
Asian	+673	+1.5

Source: ABOR, Minority Recruitment and Retention Report, 1987.

Table 4
Arizona Universities
Headcount Enrollment, Freshman Class 1986

Ethnicity	NAU		ASU		UA		COMBINED
Hispanic	120	6.7%	270	5.3%	337	8.4%	727
Am. Indian	109	6.1%	65	1.3%	52	1.3%	226
Black	33	1.8%	161	3.2%	68	1.7%	262
Asian	10	0.5%	156	3.1%	102	2.5%	268
White	1512		3399		4911		
Other	4433		58		4491		
Total	1784		5085		4016		10885

Sources: NAU Fall 1987 Undergraduate Enrollment Report;
ASU University Office of Institutional Analysis
Persistence and Graduation Summary, S.A.R.E.T.O, UA,
1/27/88.

Table 5
Arizona Universities
Minority Enrollment Underrepresentation Simulation

Ethnicity	A. Combined Fresh. Class 1096 %	#	B. Est. HS Grads 1985-86 %	C. Number for parity #	D. (A-C) #
Hispanic	6.7	727	15.7	1709	-982
Am. Indian	2.1	226	6.3	686	-460
Black	2.4	262	3.2	348	-86
Asian	2.5	268	1.3	142	+126
White+ Other	86.4	9402	73.5	8000	+1402
Total		10885			

A. Based on figures in Table 4;

B. Calculated from the percentage distribtion of the 12th grade class, Arizona State Department of Education, 1985-86 Annual Report;

C. B/100 * Total;

D. (A-C).

Table 6
Arizona State University
Persistence and Graduation of 1980 Class of "Native Freshmen"

Ethnicity	N	Number of years after entry 1	2	3	4	5
Hispanic	158					
Enrolled		55%	48%	45%	29%	18%
Graduated				1%	15%	23%
Retained		55%	48%	46%	44%	41%
Am. Indian	36					
Enrolled		44%	28%	28%	31%	11%
Graduated					3%	14%
Retained		44%	28%	28%	34%	25%
Black	75					
Enrolled		61%	51%	48%	25%	8%
Graduated					12%	20%
Retained		61%	51%	48%	37%	28%
Asian	67					
Enrolled		82%	63%	69%	34%	10%
Graduated					24%	43%
Retained		82%	63%	69%	58%	53%
White + Unknown	3083					
Enrolled		72%	61%	55%	23%	10%
Graduated				2%	30%	42%
Retained		72%	61%	57%	53%	52%

Source: ASU University Office of Institutional Analysis

Enrolled: "Students who were enrolled during the fall semester of the specified year"

Graduated: "Students who graduated prior to the fall semester of the specified year"

Retained: Enrolled + graduated

Table 7
University of Arizona
Persistence and Graduation of 1982 Class of "First-time, Full-time Freshmen"

		Number of years after entry				
Ethnicity	N	1	2	3	4	5
Hispanic	210					
Enrolled		68%	63%	55%	39%	21%
Graduated					12%	27%
Retained		68%	63%	55%	51%	48%
Am. Indian	36					
Enrolled		56%	31%	33%	31%	22%
Graduated					3%	14%
Retained		56%	31%	33%	34%	36%
Black	65					
Enrolled		62%	57%	51%	34%	14%
Graduated					10%	22%
Retained		62%	57%	51%	44%	36%
Asian	68					
Enrolled		84%	75%	76%	38%	24%
Graduated		84%	75%	77%	67%	70%
Retained		84$	75%	77%	67%	70%
White	2597					
Enrolled		74%	62%	60%	39%	16%
Graduated					17%	40%
Retained		74%	62%	60%	56%	56%

Source: PERSISTENCE AND GRADUATION SUMMARY, S.A.R.E.T.O 1/27/88

Enrolled: "Students who were enrolled during the fall semester of the specified year"
Graduated: "Students who graduated prior to the fall semester of the specified year"
Retained: Enrolled + graduated

Table 8
Arizona Universities
Student Departure Rates (Percent Not Retained)
for Three Freshman Cohorts

Ethnicity/ University	N	Number of years after entry 1	2	3	4	5
Hispanic	70					
ASU	157	45%	52%	54%	56%	59%
NAU	70	34%	43%	54%	-	-
Graduated						
Retained		66%	57%	46%	51%	48%
Am. Indian	71					
Enrolled		46%	25%	24%		
Graduated						
Retained		46%	25%	24%		
Black 16						
Enrolled		75%	44%	44%		
Graduated						
Retained		75%	44%	44%		
Asian 4						
Enrolled		100%	75%	75%		
Graduated						
Retained		100%	75%	75%		
White960						
Enrolled		77%	59%	43%		
Graduated				.3%		
Retained		77%	59%	43%		

Source: NAU Institutional Research

Enrolled: "Students who were enrolled during the fall semester of the specified year"
Graduated: "Students who graduated prior to the fall semester of the specified year"
Retained: Enrolled + graduated

Table 9
Arizona Universities
Student Departure Rates (Percent Not Retained)
For Three Freshman Cohorts

Ethnicity/ University	N	Number of years after entry 1	2	3	4	5
Hispanic						
ASU	157	45%	52%	54%	56%	59%
NAU	70	34%	43%	54%	-	-
UA	210	32%	37%	45%	49%	52%
Am. Indian						
ASU	35	56%	72%	72%	66%	75%
NAU	71	54%	75%	76%	-	-
UA	36	44*5	60%	67%	66%	64%
Black						
ASU	75	39%	49%	52%	63%	72%
NAU	16	25%	56%	56%	-	-
UA	65	38%	43%	49%	56%	64%
Asian						
ASU	67	18%	37%	31%	42%	47%
NAU	4	0%	25%	25%	-	-
UA	68	16%	25%	23%	33%	30%
White						
*ASU	3083	28%	39%	43%	47%	48%
NAU	960	23%	41%	57%	-	-
UA	2597	26%	38%	40%	44%	44%

The three cohorts are ASU (1980), NAU (1984), UA (1982). See Tables 6-8.

* = Other

Table 10
Arizona Universities
Undergraduate and Graduate/Professional Degrees Awarded
1986-1987

	NAU		ASU		UA	
Ethnicity	UG	G/P	UG	G/P	UG	G/P
Hispanic	81	12	233	63	228	43
	6.1%	2.7%	4.8%	4.4%	6.2%	2.5%
Am.Indian	47	9	36	8	13	6
	3.5%	2.0%	0.7%	0.6%	0.4%	0.3%
Black	12	3	76	18	39	9
	0.9%	0.7%	1.6%	1.3%	1.1%	0.5%
Asian	4	3	96	33	52	30
	0.3%	0.7%	2.0%	2.3%	1.4%	1.7%
*White	1187	414	4401	1299	3320	1630
	89.2%	93.9%	90.9%	91.4%	90.9%	94.9%
Totals	1331	441	4842	1421	3652	1718
Total Minority	144	27	441	122	332	88
	10.8%	6.1%	9.1%	8.6%	9.1%	5.1%

ASU and NAU figures explicitly exclude international students

* = Other for ASU

Source: ABOR Minority Recruitment & Retention Report, 1987

Table 11
Arizona Universities
Trends in Bachelor Degrees Awarded to Minority Students
1982-83 to 1986-87

University/ Ethnicity	Difference in number of degrees	Difference in % of total degrees
UA		
Hispanic	+ 51	+1.6
Am. Indian	- 18	0.4
Black	+15	+0.3
Asian	+ 15	+0.5
ASU		
Hispanic	+ 70	+1.1
Am. Indian	+ 3	0.0
Black	- 3	-0.2
Asian	+ 11	-0.1
NAU		
Hispanic	+ 0	+0.6
Am. Indian	- 17	+0.6
Black	- 10	-0.5
Asian	- 7	-1.0
COMBINED		
Hispanic	+121	+3.3
Am. Indian	+ 32	+1.0
Black	- 28	-1.0
Asian	+ 9	-0.4

Source: Cotera (1987)

Table 12
Arizona Universities
Minority Percent of Total Administrators, Faculty and Professional Staff Compared with Percent Headcount Enrollment, Fall 1987

Ethnicity/ University	% Admin	% Faculty	% Prof. Staff	% Enrollment
Hispanic				
NAU	4.3	2.3	3.2	6.1
ASU	5.6	3.4	3.9	5.1
UA	5.5	2.2	3.9	7.0
Am. Indian				
NAU	2.1	1.2	2.4	5.7
ASU	1.2	0.7	5.1	1.2
UA	0.6	0.7	1.1	0.9
Black				
NAU	2.1	0.6	3.6	1.4
ASU	4.1	1.4	0.6	2.1
UA	1.3	0.6	1.3	1.5
Asian				
NAU	1.1	1.0	1.2	0.7
ASU	1.9	6.2	3.5	2.6
UA	1.5	2.9	2.5	2.7
Total Minority				
NAU	9.6	5.2	10.4	13.9
ASU	12.8	11.6	13.1	11.0
UA	8.9	6.4	8.9	12.1
*Total Numbers				
NAU	188	483	250	12924
ASU	486	1573	771	41054
UA	528	1956	2880	31265

*Totals do not include graduate assistants or associates.

Sources: ABOR WORKFORCE ARRAY BY EEO-6 JOB CATEGORY, NAU, 10/19/87
ABOR ASU UNIVERSITY TOTALS FOR ALL JOB GROUPS FOR PAY PERIOD ENDING 9/30/87
ABOR U OF A ACTIVE WORKFORCE, OCT., 1987
ABOR Minority Recruitment & Retention Report, 1987

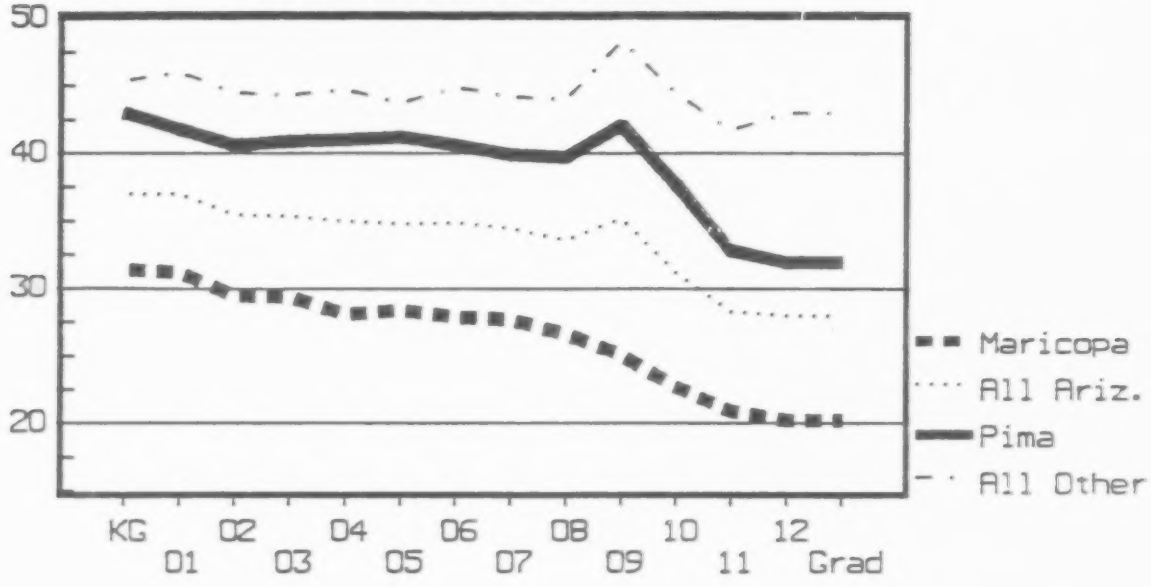
Table 13
Arizona Universities
Minority Faculty Tenure Status
Fall 1987

University/ Tenure Status	Hispanic	Am.Indian	Black	Asian	Total Min.	Total Employ.
NAU						
Tenured	18%	17%	33%	20%	20%	62%
Not Tenured On Track	36%	67%	33%	40%	44%	19%
Not Tenured Not On Track	45%	17%	33%	40%	36%	20%
Total Number	11	6	3	5	25	483
ASU						
Tenured	51%	45%	45%	35%	42%	61%
Not Tenured On Track	28%	45%	45%	28%	31%	19%
Not Tenured Not On Track	21%	9%	9%	37%	27%	20%
Total Number	53	11	22	97	183	1573
UA						
Tenured	41%	54%	42%	60%	51%	51%
Not Tenured On Track	41%	23%	25%	30%	33%	23%
Not Tenured Not On Track	18%	23%	33%	11%	17%	26%
Total Number	44	13	12	57	126	1956

Totals do not include graduate assistants or associates

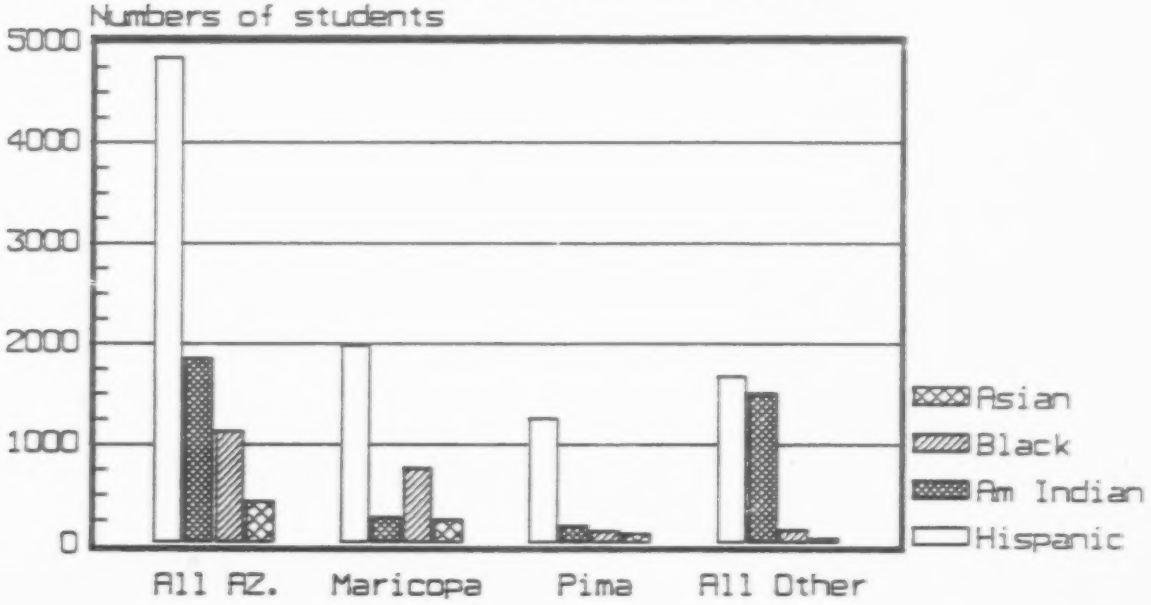
Sources: ABOR WORKFORCE ARRAY BY EEO-6 JOB CATEGORY, NAU, 10/19/87
ABOR ASU UNIVERSITY TOTALS FOR ALL JOB GROUPS FOR PAY PERIOD ENDING 9/30/87
ABOR U OF A ACTIVE WORKFORCE, OCT., 1987

Figure 1.
Percent Minority Public School Enrollment by Grade in Various Arizona Counties 1986-87



Source: Bartram and Gebel 1988

Figure 2.
Estimated Minority High School Graduates in Various Arizona Counties 1986-87



Source: Bartram and Gebel 1988